

CARD MAINTENANCE UTILITY

Version 3.06 Revision a



Card Maintenance Utility

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Card Maintenance Utility

Quick Reference Card Version 3.06 Revision A



Card Maintenance Utility updates cardholder information on Common Access Cards (CAC), Joint Services and Multi-technology Automated Reader Card (MARC) smart cards. This Quick Reference Card gives instructions for some commonly used functions. Only Administrators and Operators with assigned privileges can perform these functions. For more information, see the *Card Maintenance Utility Administrator's Guide*.



1.1.1.1.1.1.1.1 CHANGE PIN

- 1. Insert cardholder's smart card into the reader.
- 2. From the Tool Bar, click



- 3. Enter the appropriate PIN in its associated field.
- 4. Click OK.

UPDATE CARD INFO

- Insert cardholder's smart card into the reader.
- 2. Select the appropriate tab and update the card information.
- 3. From the Tool Bar, click



BACKUP CARD INFO

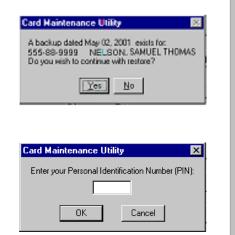
- 1. Insert cardholder's smart card into the reader.
- 2. From the Tool Bar, click 60.



- 3. Verify the card's ownership.
- 4. Click Yes.

$\frac{RESTORE\ CARD}{INFO}$

- Insert a new smart card into the reader.
- 2. From the Tool Bar, click
- 3. Verify the card's contents and click **Yes**.



4. Enter cardholder PIN and click **OK**.



CARD MAINTENANCE UTILITY

Administrator's Guide Version 3.06 Revision a



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1 WELCOME TO CARD MAINTENANCE UTILITY!

Welcome to Card Maintenance Utility, a software application used to update cardholder information on Common Access Cards (CAC), Joint Services cards and Multi-technology Automated Reader Card (MARC) smart cards.

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1.1 What is Card Maintenance Utility?

Card Maintenance Utility is a software application used to update cardholder information on Common Access Cards (CAC), Joint Services cards and Multi-technology Automated Reader Card (MARC) smart cards.

1.2 What are Smart Cards?

Smart cards are the size of standard credit cards and contain integrated circuit (IC) chips embedded in their plastic. The IC chip contains a microprocessor that securely stores, processes, and updates data. This allows the smart card to manage valuable information, process transactions, authenticate identity, and access networks or databases.

A smart card acts as a portable storage device that prevents unauthorized reading of, or changes to the data it carries. Since a smart card is a computer, it is a programmable device. Smart cards allow for extremely high levels of security because of cryptographic techniques used to encode and decode all communications between the smart card and other devices. In addition to high levels of security, smart cards have the ability to combine interfaces to many applications together in a single card.

- □ The CAC will require the cardholder to enter a Personnel Identification Number (PIN).
- □ A PIN is required to write to the card
- □ The submission of several consecutive incorrect PINs will automatically lock the card and render it unusable.
- □ The 8K smart card and CAC will be referred to as the service member's smart card.

1.3 How does Card Maintenance Utility Work?

The initial access to the application requires the use of the Application Card that is provided with the application. The Application Card allows user complete access to all of the Card Maintenance Utility's functions. To secure unwarranted access to the application and retain access in the event that the application must be re-installed, it is advised that the Application Card be store in a secure location. The initial Administrator that installs the application will use the Application Card to log on to the application, add users and add access privileges to those users, which the administrator deems appropriate.

The following individuals use the Card Maintenance Utility application in one of the following capacities:

□ **Cardholders** - These individuals cannot log on to the application. However, they may request to have various aspects of their smart card data modified.

- Operators These individuals can log on to the application. Their privileges are specified by the administrator, which allows them to perform certain cardholder modification functions. These modification functions may include:
 - Updating personal, military, and organizational information
 - Changing personal identification numbers (PINs)
 - Moving backed up cardholder information to a new card
- □ **Administrators** can log on to the application. They can create new Administrators and Operators. They can add access privileges to themselves and others. They can perform all cardholder modification functions.

As an Administrator or Operator, you can use Card Maintenance Utility to update smart card information for a cardholder. You can also change a cardholder's PIN, back up the cardholder's data in the database, and move cardholder data to a new smart card. For your convenience, the Appendix in this manual provides reference charts to standard military codes such as Non Appropriated Funds, Appropriated Funds, MEC, Pay grade, and Rank.

Herein this document, the phrase "user" refers only to an administrator or operator. Card Maintenance Utility has active and archive databases. The active database keeps a record of all Operators and Administrators. It also keeps a record of all current cardholder modifications. Older cardholder modifications can be moved to the archive database. This keeps the application streamlined and performing at optimal levels.

Card Maintenance Utility allows you to create customized administrative reports. The application allows you to select topics, dates, and individuals to include in your reports. These reports may be viewed and/or printed.

1.4 What are the Benefits of Card Maintenance Utility?

The benefits of the Card Maintenance Utility application include:

Efficiency Quickly change a cardholder's information when the need arises. Use

one application to change cardholder information on three different

types of card systems.

Security Requires application users to be registered as Operators or

Administrators to log on. Application's functions controlled through

specified user privileges.

Reduced Paperwork Automatically stores smart card information in the database.

Simplicity PCSC compatibility enables the program to interface with all types of

card readers.

Smart cards also have the following inherent benefits:

Reduce the number of cards a Service member needs to carry.

- □ Reduce redundant business processes, such as duplicate data entry.
- □ Provide a portable information carrier device that interacts with different types of databases.

2 INSTALLATION AND STARTUP

The Card Maintenance Utility application is easy to install and run. Once the application is installed successfully, it is important to configure the application settings.

This chapter provides all of the information needed to install and run the software, as well as to configure the application settings.

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2.1 System Requirements

To run properly, Card Maintenance Utility requires the following hardware:

- □ Personal computer
- □ 64 MB of RAM
- □ 30 MB of hard drive space
- □ Windows 98, NT or 2000
- □ Smart card reader GCR 400, GCR 410, GemPC Serial-SL, GemPC USB-SL or equivalent
- □ Common Access Card (CAC), Joint Services or MARC smart cards
- □ App Card (supplied with the application; used for initial start up only)

2.2 Install Card Maintenance Utility

Card Maintenance Utility installs like most other Windows-based applications. (The Installation of Card Maintenance Utility over a previous version will remove the previous version while the database is preserved.)

To install the Card Maintenance Utility application:

- 1. Insert the CD into the CD-ROM drive and follow the on-screen instructions.
 - The installation process should begin automatically.
- 2. If the installation does not occur automatically, perform the following steps:
 - a. Open Windows Explorer.
 - b. Select the drive designated for the CD-ROM.
 - c. Select **Setup.exe**.
 - d. Follow the on-screen instructions

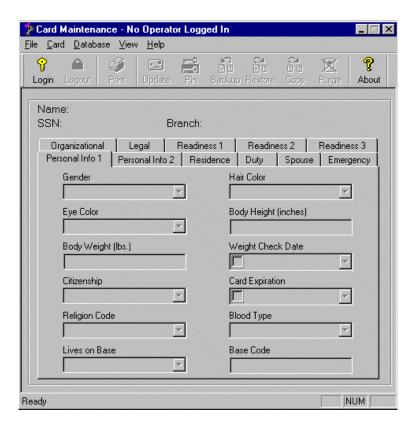
2.3 Start Card Maintenance Utility

To start Card Maintenance Utility:

- 1. From the Microsoft Windows screen, click Start
- 2. From the Start Menu select Programs→ Smart Card Applications→ Card Maintenance Utility.

The Card Maintenance Utility application starts.

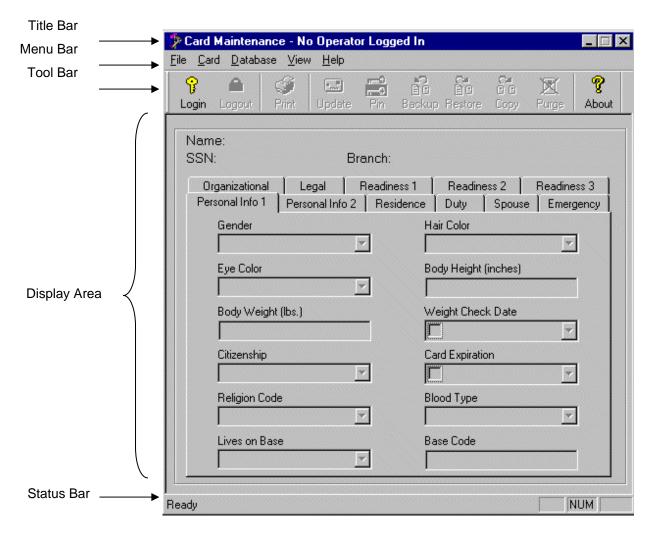
The Main screen appears (please see the following figure). For more information about the Main screen, see section 2.4.



NOTE: THE FIRST TIME THE APPLICATION IS RUN, THE APPLICATION SETTINGS MUST BE CONFIGURED. SEE SETTINGS SECTION 2.5.

2.4 Main Screen

The Main screen is where the user performs all of the application's functions. The following figure identifies the main components of the Main screen.



2.4.1 Title Bar

The Title Bar, located at the top of the Main screen, displays the application name and the name of the Administrator or Operator who is currently logged on.



2.4.2 Menu Bar

The Menu Bar appears below the Title Bar.

|--|

The options on the Menu Bar include:

- □ File
- □ Card
- □ Database
- □ View
- □ Help

Each Menu Bar option, when selected, displays a drop-down lists of available command options.

2.4.2.1 File Menu

The following command options appear on the File Menu drop-down list:

Operator Logon Log onto the application.

Operator Logout Log out of the application.

Modify Privileges Add, remove, and modify Administrator and Operator privileges.

Settings Set the application database and smart card reader port locations.

Print Reports Print customized administrative reports.

Exit Exit the Card Maintenance Utility application.

2.4.2.2 Card Menu

The following command options appear on the Card Menu drop-down list:

Update Card Save data modifications to the smart card.

Change Pin Change a cardholder's PIN.

Unlock Pin Permits a new PIN assignment when the old PIN is not known. (This

feature is not available to the CAC card system.)

Backup Card Store cardholder data to an information file for future use.

Restore Card Write from information file, backed up cardholder data to a new smart

card. The SSN on the card must be identical to the SSN in the information

file.

Copy Card Copy all the information contained on an existing smart card to another

selected card and/or card type. Both of the smart card's SSNs must be

identical.

Purge Card Remove all information contained on the smart card except the

cardholder's Name, SSN, Duty Status, Branch, Gender, Card Expiration, Blood Type, Pay Grade and Rank. Refer to page 35 for a list of the

elements that are not purged from a CAC.

MEC Maintenance Import, Purge and Update MEC/UIC information on a smart card if the user's

SSN exists in the MEC Import table.

2.4.2.3 Database Menu

The following command options appear on the Database Menu drop-down list:

Archive Move specified modification records from the active database to an archive database

for storage.

Import Import records from the archive database to the active database, using the person's

name or a date range.

Delete Delete designated records from the database.

2.4.2.4 View Menu

The following command options appear on the View Menu drop-down list:

Tool Bars Show or hide Toolbar and text labels. Show large or small Toolbar icons.

Status Bar Show or hide the Status Bar.

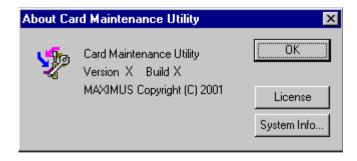
2.4.2.5 *Help Menu*

The following command options appear on the Help Menu drop-down list:

Contents Open the Online Help for Card Maintenance Utility

About View basic information about the application. This command option displays the

About Card Maintenance Utility window.



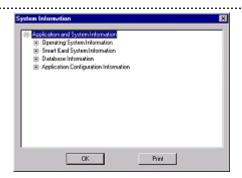
The About Card Maintenance Utility window will also appear when you click About on the Tool Bar.

The following describes the components in the About Card Maintenance Utility window:

OK The Main screen appears.

License The Licensing Information window appears.

System Info The System Information window appears.



To view the details of the system, expand the applicable directory(s).

To print all the detailed information on the system:

3. Click Print.

The standard Print window appears.

4. Click **OK**.

The System Information appears.

5. Click OK.

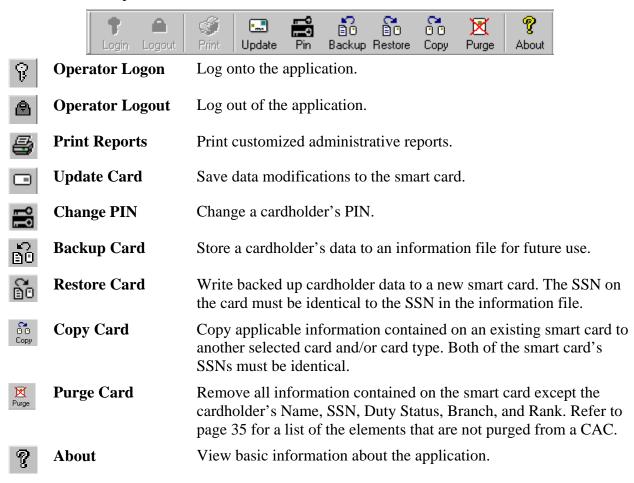
The About Card Maintenance Utility window appears.

6. Click OK.

The Main screen appears.

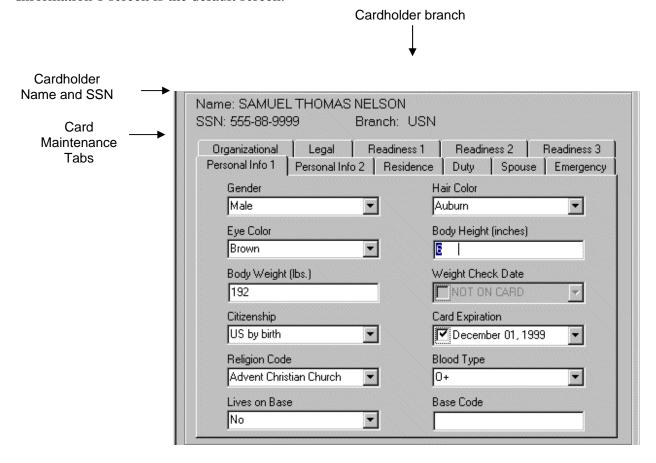
2.4.2.6 Tool Bar

The Tool Bar, located below the Menu Bar of the Main screen, provides shortcuts to some of the menu command options.



2.4.3 Display Area

The Display Area, located below the Tool Bar, contains the data on the cardholder. The Personal Information 1 screen is the default screen.



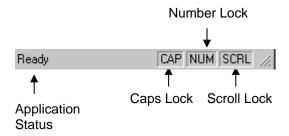
The maintenance tabs allow the user to view and change data in different cardholder information screens.

NOTE: FOR A COMPLETE LIST OF THE INFORMATION CONTAINED UNDER EACH CARD MAINTENANCE TAB, SEE APPENDIX C (PAGE57).

2.4.4 Status Bar

The Status Bar, located at the bottom of the Main screen, displays status for the following:

- Application
- Caps Lock function on the keyboard
- □ Number Lock function on the keyboard
- □ Scroll Lock function on the keyboard



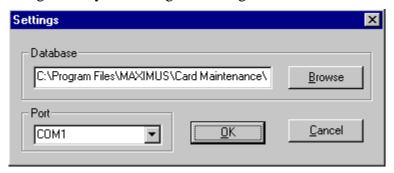
2.5 Configure the Settings

For the application to function properly, the Card Maintenance Utility settings must be configured. The settings include:

Database Specifies the location of the Card Maintenance Utility database within the computer.

Port Specifies the communications port to which the smart card reader is attached.

The first time the application starts, the Settings window appears automatically. Subsequently, the settings can be changed at any time using the Settings command.



To configure the settings:

- 1. To configure the Database location:
 - In the Database field, enter in the full name and path of the Card Maintenance Utility database (maintenance.mdb).

Or

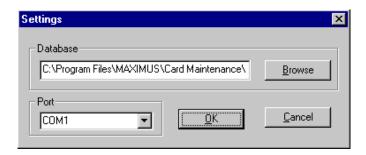
e. Click Browse.

The Open window appears.



- 1) In the Look In field, select the location of the database.
- 2) From the Display Area, select the applicable database file name. The database file name appears in the File name field.
- 3) Click Open.

The Settings window appears with the database file name displayed in the Database field.



2. From the Port drop-down list, select the port connection that the card read is attached to.

Or

If PC/SC is installed, select the type of reader that is connected.

NOTE: IF PCSC IS INSTALLED ON THE COMPUTER, THE PORT DROP-DOWN LIST CONTAINS A SELECTION FOR THE TYPE OF CARD READER THAT IS ATTACHED. THE **TYPE** OF CARD READER MUST BE SELECTED FROM THIS LIST.

3. After the configuration settings are complete, click OK. The Main screen appears.

2.6 Log On

The initial access to the Card Maintenance Utility application requires the use of the Application Card provided with the application.

After the initial access, the Card Maintenance Utility functions are accessed by the log on of an Administrator or Operator. (See section 3.2 for information on designating users as Administrators and Operators.)

To Login to Card Maintenance Utility:

1. From the Menu Bar, select File → Operator Logon.

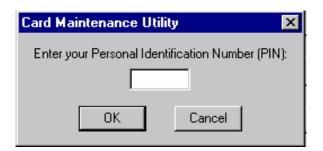
Or

From the Tool Bar, click Login

The Insert Smart Card dialog box appears.

2. Insert your smart card into the card reader.

The Enter PIN window appears.



3. Enter your PIN in the field.

NOTE: IF USING THE APP CARD FOR AN INITIAL LOG ON, USE THE APP CARD'S PIN.

WARNING: THE SUBMISSION OF <u>THREE</u> CONSECUTIVE INCORRECT PINS WILL AUTOMATICALLY LOCK THE CARD AND RENDER IT UNUSABLE.

4. Click OK.

Your PIN is verified when the Remove Smart Card dialog box appears.

0r

If your PIN is not verified, the Invalid PIN dialog box appears and requires the following action:

• Click OK.

The Remove Smart Card dialog box appears.

- f. Remove your smart card from the reader, and begin the log on process again. If the Invalid PIN dialog box continues to appear, refer to section 4.2, Changing a PIN.
- 5. Remove your smart card from the reader when the Remove Smart Card dialog box appears.

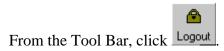
2.7 Log Out

Whenever you have completed your Card Maintenance Utility functions, or will be away from the application, it is essential to the security of the application that you log out.

To log out of Card Maintenance Utility:

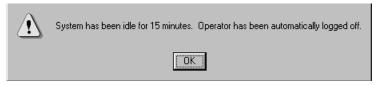
1. From the Menu Bar, select **File** → **Operator Logout**.

Or



You are logged out.

After 15 minutes of Card Maintenance Utility inactivity, the application automatically logs you off the application and the Automatic Logoff dialog box appears.



2. To respond to the message, click OK.

You are logged out, and the Main screen appears.

3 ADMINISTRATORS AND OPERATORS

The initial access to the application requires the use of the Application Card provided with the application. The Application Card allows complete access to the Card Maintenance Utility's functions. The initial Administrator must use the Application Card to designate his/her card with full privileges to designate other authorized users as Administrators or Operators, and determine their application access privileges.

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3.1 Overview

To ensure the integrity and security of the Card Maintenance Utility data, only administrators and operators with the appropriate privileges can access the application's functions. The user designation types include:

Administrator Administrators can log on, and they have access to application functions

according to their specified privileges. (See section 3.5 for information on adding privileges.) They can also designate users as Operators or

Administrators.

Operator Operators can log on, and they have access to application functions according

to their specified privileges. (See section 3.5 for information on adding

privileges.)

A special Application Card is included with the application. This special Application Card is a smart card that allows initial access to the application's functions. The Application Card should be used only to designate the **initial** Administrator.

As an Administrator, you can perform the following:

- □ Designate others as Administrators or Operators.
- □ Specify the access privileges for each type of user (i.e., Administrators and Operators).

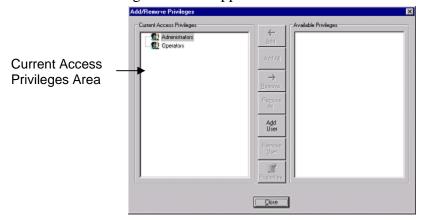
3.2 Adding Administrators and Operators

To add users (i.e., Administrators or Operators), an Administrator must be logged onto the application. For more information about logging on, see section 2.6.

To add a user:

1. From the Menu Bar, select **File** → **Modify Privileges**.

The Add/Remove Privileges window appears.



- 2. In the Current Access Privileges Area, select the applicable type of privilege in which to associate the cardholder, **Administrator** or **Operator**.
- 3. Click **Add User**.
- 4. The Insert smart card dialog box appears.
- 5. Insert the cardholder's smart card into the card reader. (Depending on the card type, a PIN may be required to read the card. If required, have the cardholder enter their PIN.)

The User Properties window appears, as shown in the following figure.



NOTE: THE APPLICATION AUTOMATICALLY SETS THE EXPIRATION DATE FOR ONE YEAR AFTER THE DATE SET ON THE COMPUTER. THE EXPIRATION DATE IS THE DATE THAT THE PRIVILEGES BECOME INACTIVE AND THE CARDHOLDER CAN NO LONGER ACCESS THE APPLICATION.

6. If applicable, enter the new expiration date in the Expiration Date field, using the YYYY/MM/DD format (where Y=year, M=month, D=day).

0r

Click the drop-down arrow and select the data from the pop-up calendar.

7. Click OK.

The Remove smart card dialog box appears.

8. Remove the smart card from the reader.

The Add/Remove Privileges window appears. The Administrator/Operator is added to the database.

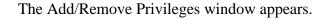
9. To return to the Main screen, click **Close**.

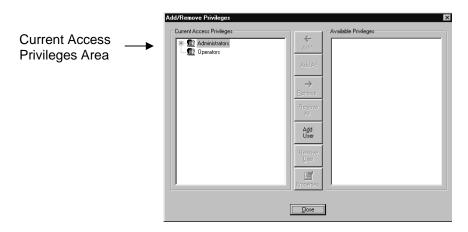
3.3 Removing Administrators and Operators

To remove users (i.e., Administrators or Operators), an Administrator must be logged onto the application (For more information about logging on, see section 2.6.)

To remove a user:

1, From the Menu Bar, select **File** → **Modify Privileges**.





- 2. In the Current Access Privileges Area, expand the applicable directory (i.e., Administrator or Operator).
- 3. Select the desired user name.
- 4. Click Remove User.

A warning dialog box appears.

NOTE: REMOVING THE ADMINISTRATOR OR OPERATOR WILL REMOVE THEIR ACCESS PRIVILEGES TO THE APPLICATION.

5. Click Yes.

The Add/Remove Privileges window appears. The selected user no longer appears in the Add/Remove Privileges window.

6. To return to the Main screen, click **Close**.

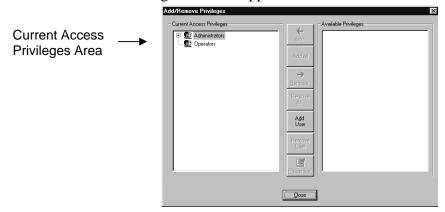
3.4 Changing Expiration Dates

After an Administrator or Operator has been added to the database, their privileges expiration date can be changed at any time. Only an Administrator logged onto the application can perform this function. (For more information about logging on, see section 2.6.)

To change the expiration date:

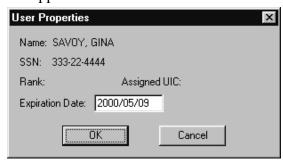
1. From the Menu Bar, select **File** → **Modify Privileges**.

The Add/Remove Privileges window appears.



- 2. In the Current Access Privileges Area, expand the applicable directory (i.e., Administrator or Operator).
- 3. Select the desired user name.
- 4. Click **Properties**.

The User Properties window appears.



5. Enter the new expiration date in the Expiration Date field, using the YYYY/MM/DD format.

Or

Click the drop-down arrow and select the data from the pop-up calendar.

6. Click **OK**.

The Add/Remove Privileges window appears. The new expiration date is saved to the database.

7. To return to the Main screen, click **Close**.

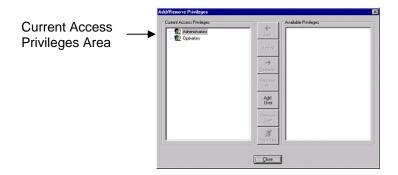
3.5 Add Privileges

The Add Privileges function allows administrators to designate which specific application functions can be accessed by a cardholder. Only the privileges an administrator records to a cardholder's smart card can be accessed by the cardholder therefore restricting the cardholder from all other functions within the application.

To add privileges:

1. From the Menu Bar, select **File** → **Modify Privileges**.

The Add/Remove Privileges window appears.

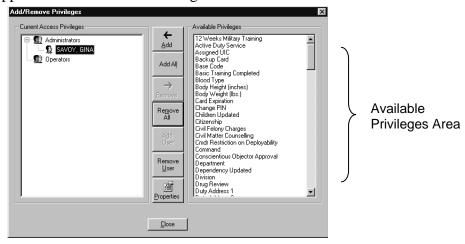


2. In the Current Access Privileges Area, expand the applicable directory (i.e., Administrator or Operator).

The directory expands, and lists of user names appear.

3. Select the desired user name.

The user privileges appear in the Available Privileges Area.



4. Select the privilege(s) you wish to add.

The selected privilege(s) is highlighted.

To deselect a privilege, select the privilege until the highlight disappears.

NOTE: USERS CAN BE GRANTED ALL THE PRIVILEGES AVAILABLE OR ONLY SPECIFIC ONES.

5. Click Add.

The privileges are added to the selected user name.

The added privileges disappear from the Available Privileges Area.

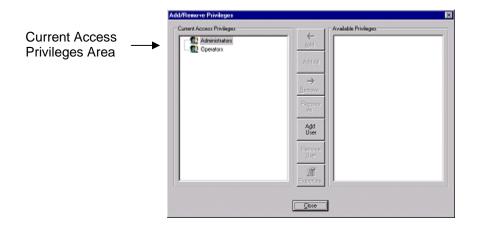
NOTE: TO ADD ALL OF THE PRIVILEGES TO THE USER'S SMART CARD, CLICK **ADD ALL.**

- 6. Repeat steps 3-5 to add privileges to other users.
- 7. To return to the Main screen, click **Close**.

3.6 Removing Privileges

1. From the Menu Bar, select **File → Modify Privileges**.

The Add/Remove Privileges window appears.



2. In the Current Access Privileges Area, expand the applicable directory (i.e., Administrator or Operator).

The directory expands, and lists of user names appear.

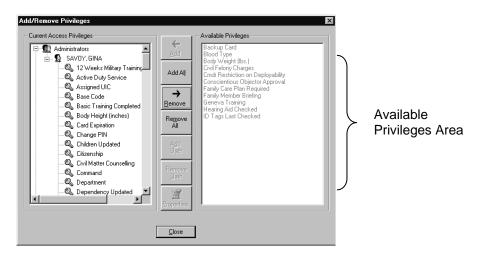
3. Select the desired user name.

The user name opens, and the user's privileges appear.



- 4. Select the privilege you wish to remove.
- 5. Click Remove.

The privilege no longer appears in the Current Access Privileges Area, instead, it appears in the Available Privileges Area. To remove additional privileges, repeat steps 3-5.



NOTE: ONLY ONE PRIVILEGE MAY BE REMOVED AT A TIME.

NOTE: TO REMOVE ALL OF THE PRIVILEGES IN ONE STEP, CLICK **REMOVE ALL**. ALL OF THE PRIVILEGES ARE REMOVED FROM THE USER'S PRIVILEGES LIST AND APPEAR IN THE AVAILABLE PRIVILEGES AREA.

6. To return to the Main screen, click **Close**.

4 CARD MAINTENANCE

Administrators and Operators with the applicable privileges can modify cardholder's smart cards.

This chapter explains how to perform card maintenance functions.

In this Chapter	Page
Update Card Information	27
Change a PIN	28
Unlock a PIN	30
Back Up Card Information	31
Restore Card Information	32
Copy Card	33
Purge Card	34

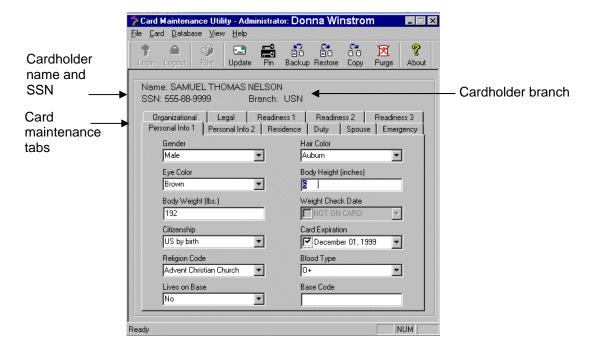
4.1 Update Card Information

Administrators or Operators with the appropriate privileges can update certain data on a cardholder's smart card.

To update a cardholder's smart card:

1. From the Main screen, insert the cardholder's smart card into the reader. (Depending on the card type, a PIN may be required to read the card. If required, have the cardholder enter their PIN.)

The user's smart card information appears in the Display Area.



NOTE: INFORMATION FOR WHICH YOU DO **NOT** HAVE PRIVILEGES IS GRAYED OUT. THE FOLLOWING ELEMENTS CANNOT BE CHANGED REGARDLESS OF PRIVILEGES:

- □ First Name
- Last Name
- □ SSN
- Branch
- 2. Select the card maintenance tab you wish to update.

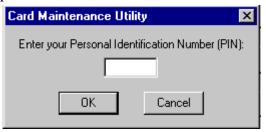
The applicable card maintenance tab screen appears.

- 3. Update the necessary cardholder information.
- 4. From the Menu Bar, select Card → Update Card.

Or

From the Tool Bar Click .

The Enter PIN window appears.



NOTE: FOR A COMPLETE LIST OF THE INFORMATION CONTAINED UNDER EACH CARD MAINTENANCE TAB SEE PAGE 57.

- 5. Have the cardholder enter their PIN.
- 6. Click OK.

If the PIN is verified, the Successful Update dialog box appears.

Or

If the PIN is not verified, the Invalid PIN dialog box appears and requires the following action.

- Click OK, and try again.
- If the Invalid PIN dialog box continues to appear, and the cardholder's identity is verified, you may need to change the cardholder's PIN. (See section 4.2, Changing a PIN.)

WARNING: THE SUBMISSION OF <u>THREE</u> CONSECUTIVE INCORRECT PINS WILL AUTOMATICALLY LOCK THE CARD AND RENDER IT UNUSABLE.

7. Click OK.

The Main screen appears. The updated information is saved to the smart card and the database.

8. Remove the smart card from the reader.

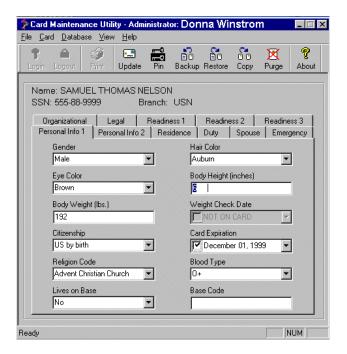
4.2 Change a PIN

Administrators or Operators with the appropriate privilege can change a cardholders' PIN.

To change a cardholder's PIN:

1. From the Main screen, insert the smart card into the reader. (Depending on the card type, a PIN may be required to read the card. If required, have the cardholder enter their PIN.)

The card information appears in the Display Area.



2. From the Menu Bar, select Card → Change PIN.

Or

From the Tool Bar, click

The Change PIN window appears.



- 3. Have the cardholder enter their existing PIN in the Enter Old PIN field.
- 4. Have the cardholder enter the new PIN in the Enter PIN field and Confirm PIN field.
- 5. Click OK.

The Successful PIN Change dialog box appears.

6. Click OK.

The Main screen appears. The PIN is changed on the card.

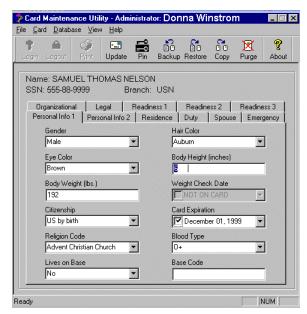
7. Remove the smart card from the reader.

4.3 Unlock Pin

Administrators or Operators with the appropriate privilege can unlock a cardholders' PIN. The Unlock feature permits a PIN change on the card without knowing the original PIN. (*This feature is not available for the CAC smart card system.*)

To unlock a cardholder's PIN:

 From the Main screen, insert the smart card into the reader. (Depending on the card type, a PIN may be required to read the card. If required, have the cardholder enter their PIN.)
 The card information appears in the Display Area.



2. From the Menu Bar, select Card → Unlock PIN.

The Unlock PIN window appears.



- 3. Have the cardholder enter the new PIN in the Enter PIN field and Confirm PIN field.
- 4. Click **OK**.

The Successful PIN Change dialog box appears.

5. Click OK.

The Main screen appears. The PIN is changed on the card and in the database.

6. Remove the smart card from the reader.

4.4 Backup Card Information

Administrators or Operators with the appropriate privilege can backup information on a cardholder's smart card to the database. If a card is lost or stolen, you can retrieve the file from the database, and restore it to a new smart card.

To back up the user's card information:

1. From the Main screen, insert the cardholder's smart card into the reader. (Depending on the card type, a PIN may be required to read the card. If required, have the cardholder enter their PIN.)

The smart card information appears in the Display Area.



2. From the Menu Bar, select Card → Backup Card.

Or

From the Tool Bar, click 60.

The Backup Confirmation dialog box appears.



3. Click Yes.

The Main screen appears. The smart card information is saved to the database.

4. Remove the smart card from the reader.

4.5 Restore Card Information

Administrators or Operators with the appropriate privilege can restore (write) a cardholder's data from the previous backup file database to a new smart card. (See section 4.4, Backup Card Information.) The destination smart card must have the cardholder's SSN, First Name, Middle Name and Last Name encoded on the card. The SSN and L Name on the card and stored in the backup file must be identical to restore the card information. (For more information, see the system administrator.)

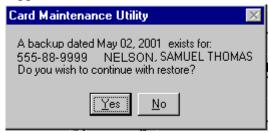
To restore backed up smart card information to a new smart card:

- 1. From the Main screen, insert a new card into the reader. (Depending on the card type, a PIN may be required to read the card. If required, have the cardholder enter their PIN.)
- 2. From the Menu Bar, select Card → Restore Card.

Or

From the Tool Bar, click

A confirmation dialog box appears.



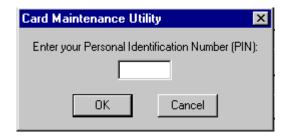
If a Backup does not exist for the cardholder, a message will appear.



Leaving the cardholder's smart card inserted in the card reader, create a backup file by clicking the Backup icon on the tool bar.

3. Click Yes.

The Enter Pin window appears.



- 4. Enter the cardholder's PIN in the field.
- 5. Click **OK**.

If the PIN is verified, the Main screen appears. The card information has been restored to the new smart card.

Or

If the PIN is not verified:

The Enter Pin window appears.

- Enter the cardholder's PIN in the field.
- Click OK.
- If the Invalid PIN dialog box continues to appear, see the System Administrator.

WARNING: THE SUBMISSION OF <u>THREE</u> CONSECUTIVE INCORRECT PINS WILL AUTOMATICALLY LOCK THE CARD AND RENDER IT UNUSABLE.

4.6 Copy Card

Administrators or Operators with the appropriate privilege can copy the data from an existing smart card to another card where both cards have the same SSN. The intended use of this functionality is to transfer existing data onto the CAC prior to retiring the non-CAC.

To copy a smart card:

1. From the Main screen's Menu Bar, select Card → Copy Card.

Or



From the Tool Bar, click

- 2. When prompted by the Insert Source smart card message, insert the source smart card into the card reader. (Depending on the card type, a PIN may be required to read the card. If required, have the cardholder enter their PIN.)
- 3. When prompted by the Remove smart card message, remove the smart card from the card reader.
- 4. When prompted by the Destination smart card message, insert the destination smart card into the card reader.

The Enter PIN window appears.

NOTE: IF THE CARDHOLDER'S CARD FAILS TO COPY, REFER THE CARDHOLDER TO THEIR SUPERIOR TO BE ISSUED A NEW CARD.

- 5. In the Enter PIN field, enter the PIN.
- 6. Click OK.

Briefly, the Writing to smart card message appears.

The Copy Complete message appears.

- 7. Click OK.
- 8. When prompted by the Remove smart card message, remove the smart card from the card reader.

The Main screen appears.

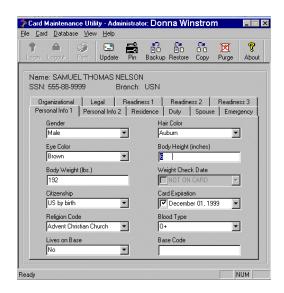
4.7 Purge Card

Depending on your privileges, you can remove all the information on a cardholder's smart card except for the cardholder's Name, SSN, Duty Status, Branch of Service, and Rank. (See Elements not purged from a CAC on page 35.)

To purge the information from a cardholder's smart card:

1. From the Main screen, insert the smart card into the reader. (Depending on the card type, a PIN may be required to read the card. If required, have the cardholder enter their PIN.)

The card information appears in the Display Area.



2. From the Menu Bar, select Card → Purge Card.

Or

From the Tool Bar, click

A warning of lost data message appears.

3. To continue with the Purge, click **Yes**.

A message to backup the card before Purging appears.

- To backup the card before the Purge, click **Yes**.
 - When prompted, verify the card information is correct.
 - If the card information is correct, click **Yes**.

Or

If the card information needs to be changed, click **No**.

- 4. To proceed without backing up the card before the Purge, click **No**.
- 5. When prompted, enter the cardholder's PIN.
- 6. From the Enter PIN window, click **OK**.

Elements not purged from a CAC

Blood Type	Branch	Card Expiration Date
Card Issue Date	Card Security Code	Commissary Code
Contractor Code	Date Demographic Data on	Date Demographic Data was
	Chip Express	Located on chip
Date of Birth	Direct Care End Date	End Date
Entitlement Code	Entitlement Condition	Exchange Code
Gender	Government Agency	Last Name
Medical Benefits End Date	Middle Name	MWR Code
Non-Government Agency	Organ Donor	Pay Category
Pay Grade	Person Designator	Person Identifier
Personnel Category	Rank	Social Security Number
Suffix	Type Code	Customer ID
Equipment Custodian	Item Codes C	Item Codes S
Organization and Shop Code	Routing ID	SatsCard Info

4.8 MEC Maintenance

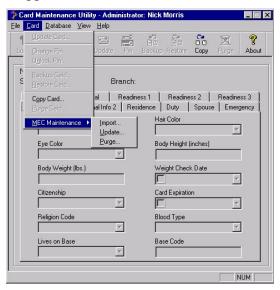
Meal Entitlement Code (MEC) Maintenance provides the ability to Import data into the database, Update card elements and Purge data from the database. In addition to importing, updating and purging data from the database, the MEC Maintenance file can be updated by following steps a through e in the order they are given:

- 1. Copy the MEC import file to a location on the hard drive. Note the location of the file, for the file will be required in steps c through e.
- 2. Log on to CMU, as an administrator/operator with Purge MEC and Import MEC privileges.
- 3. Perform a MEC Maintenance Purge. (Refer to section 4.8.3)
- 4. Perform a MEC Maintenance Import. (Refer to section 4.8.1)
- 5. Delete the MEC import file for the location on the hard drive when update is complete.

4.8.1 Import MEC

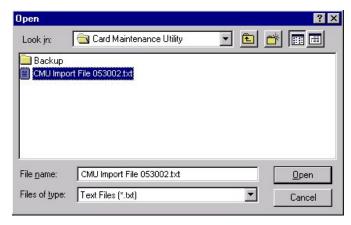
Import allows the user to select a comma-delimited text file containing a list of (SSN, UIC) pairs. The imported values are placed in the MECImport table in the database.

1. As required, log on to the application.



- 2. From the Main screen menu bar, select Card.
- 3. From the Card Menu, select MEC Maintenance.
- 4. Select Import.

The Open window appears.



- 5. From the Open window Look in field, locate the applicable file.
- 6. Click the applicable file.

The file is highlighted and the file name appears in the File name text field.

7. Click Open.

Depending on the size of the file this may take a few minutes.

8. From the message that process was Successful, click **OK**.

4.8.2 Update MEC

Update allows the user to update the MEC and UIC information on the card if the user's SSN exists in the MECImport table.

- 1. As required, log on to the application.
- 2. From the Main screen menu bar, select **Card**.
- 3. From the Card Menu, select **MEC Maintenance**.
- 4. Select **Update**.
- 5. When prompted, insert the cardholder's smart card into the card reader.
- 6. Enter the Cardholder's PIN.
- 7. Click OK.

The card is automatically updated and an Update Successful message appears.

- 8. Click OK.
- 9. When prompted, remove the smart card from the reader.
- 10. If updating is completed, click **Cancel**.

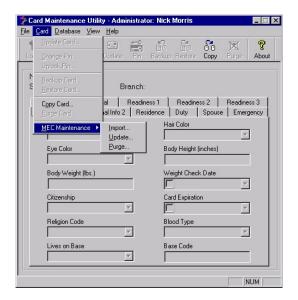
Or

Insert the next card to be updated.

4.8.3 Purge MEC

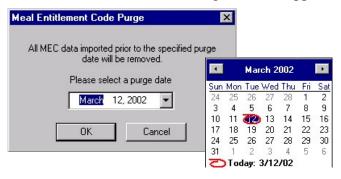
Purge allows the user to select a purge date and deletes all elements entered into the MECImport table that occur prior to the purge date.

- 1. As required, log on to the application.
- 2. From the Main screen menu bar, select **Card**.
- 3. From the Card Menu, select **MEC Maintenance**.



4. Select Purge.

The Meal Entitlement Code Purge window appears.



5. Click the "**Please Select Purge Date**" drop-down arrow.

A pop-up calendar appears.

NOTE: WHEN UPDATING THE MEC MAINTENANCE <u>FILE</u>, SELECT <u>TODAY'S</u> DATE AS THE PURGE DATE. THIS WILL PURGE ALL EXISTING DATA CURRENTLY IN THE SYSTEM

- 6. At the top of the calendar, click the left or right arrow to select the applicable **month and year**.
- 7. From the applicable month and year, click on the applicable **day**. The selected date will appear in the "Please Select Purge Date" field.
- 8. Click OK.

A message will appear stating that process was Successful

9. Click **OK**.

Or

If no data is available to be purged, the following screen is displayed.



This occurs if the data was previously purged, or if a MEC import file has not been imported. Click \mathbf{OK} .

5 DATABASE OPERATIONS

Card Maintenance Utility has active and archive databases. The active database keeps a record of all Operators and Administrators and a record of all current cardholder modifications. The application allows you to move older cardholder modification records to the archive database or delete the record from the database. This keeps the application streamlined and performing at optimal levels.

This chapter explains how to keep the Card Maintenance Utility database streamlined and performing at optimal levels.

In this Chapter	Page
Archive Card Modification Records	41
Import Card Modification Records	42
Delete Card Modification Records	44

5.1 Archive Card Modification Records

Administrators or Operators with the appropriate privilege can archive records of card modifications made before a specified date. These records are removed from the active database and moved to the archive database for storage. This helps to keep the active database streamlined.

To archive all card modifications prior to a specified date:

1. From the Menu Bar, select **Database** → **Archive**.

The Archive Date pop-up window appears.



NOTE: TO USE THIS FUNCTION, A SMART CARD **CANNOT** BE INSERTED IN THE READER.

NOTE: THE SYSTEM DATE DEFAULTS IN THE ARCHIVE DATE WINDOW.

2. Enter the archive date in the field using the YYYY/MM/DD format (where Y=year, M=month, D=day).

Or

Click the drop-down arrow and select the data from the pop-up calendar.

3. Click OK.

The Archive Success dialog box appears.

4. Click OK.

The Main screen appears. All records modified before the specified date are archived.

Card Maintenance Utility has an automatic archiving feature. If no records have been archived for 30 days, a warning dialog box appears when the application starts.



To respond to this warning message if you *do not* wish to archive the database log.

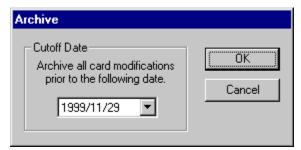
5. Click No.

No archiving is performed, and the application starts as usual. This archiving message appears again in seven days if no archiving has been performed

Or

To respond to this warning message if you *do* wish to archive the database log. Click **Yes**.

The Archive Date window appears.



NOTE: THE SYSTEM DATE DEFAULTS IN THE ARCHIVE DATE WINDOW.

- Enter the archive date in the Cutoff Date field using the YYYY/MM/DD format (where Y=year, M=month, D=day).
- Click OK.

The Archive Success window appears.

g. Click OK.

The records modified before the selected date are archived. The application starts, and the Main screen appears.

5.2 Import Card Modification Records

Administrators and Operators with the appropriate privilege can import archived card modification records back to the active database. Importing can be done based on the person's name or by a selected date.

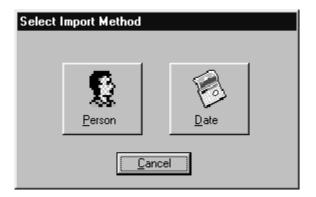
5.2.1 Import by Person

To import by person:

1. From the Menu Bar, select **Database** → **Import**.

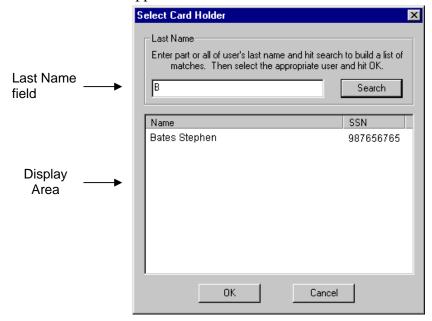
The Select Import Method window appears.

NOTE: TO USE THIS FUNCTION, A SMART CARD **CANNOT** BE INSERTED IN THE READER.



2. Click Person

The Select Cardholder window appears.



- 3. In the Last Name field, enter the cardholder's last name.
- 4. Click **Search**.

A list of names matching the search criteria appears in Display Area.

- 5. Select the applicable name.
- 6. Click **OK**.

An import complete dialog box appears.

7. Click **OK**.

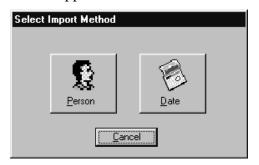
The Main screen appears. The import is complete, and the person's card modification record can now be accessed in the active database by inserting the person's smart card.

5.2.2 Import by Date

To import by date:

1. From the Menu Bar, select **Database** → **Import**.

The Select Import Method window appears.



2. Click Date.

The Import Dates window appears.



3. Enter in the date parameters in the From field and To field of the Date Range area, using the YYYY/MM/DD format (where Y=year, M=month, D=day).

Or

Click the drop-down arrow and select the data from the pop-up calendar.

4. Click **OK**.

The Import Complete dialog box appears.

5. Click OK.

The Main screen appears. The import is complete. The card modification records are now accessible in the active database.

5.3 Delete Card Modification Records

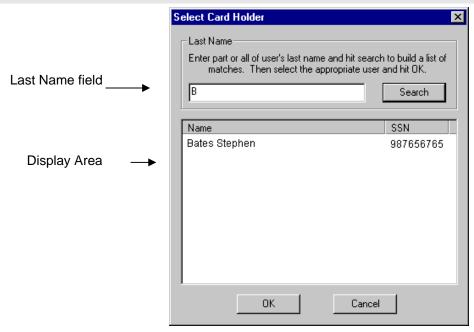
The Delete Card Modification Records function allows the appropriate user to delete card modification records from the active and archive databases. Records are first removed from the main database. The application will then inquire if archived records are to be deleted.

To delete card modification records:

1. From the Menu Bar, select **Database** → **Delete**.

The Select Cardholder window appears.

NOTE: TO USE THIS FUNCTION, A SMART CARD **CANNOT** BE INSERTED IN THE READER.



- 2. In the Last Name field, enter the cardholder's last name.
- 3. Click Search

A list of names matching the search criteria appears in Display Area.

- 4. From the Display Area, select the name of the cardholder whose card modification records you wish to delete.
- 5. Click OK.

A Deletion Confirmation dialog box appears.

6. Click Yes.

A Deletion Complete dialog box appears.

7. Click OK.

The Main screen appears. The record is deleted from both the active and archive databases.

6 REPORTS

This chapter explains how to view or print customized administrative reports. The reports are based on information gathered by the Card Maintenance Utility application.

In this Chapter	Page
View Reports	47
Print Reports	52

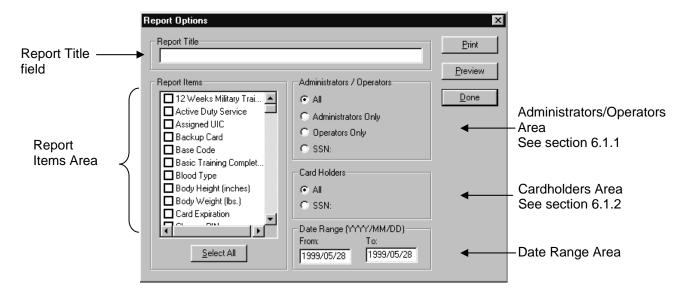
6.1 View Reports

Administrators and Operators with the appropriate privilege can generate customized administrative reports based on information gathered by the Card Maintenance Utility application. Reports can be customized by selecting different combinations of Report Options to view or print.

To generate a customized report:

1. From the Menu Bar, select **File** → **Print Reports**.

The Report Options window appears.



- 2. In the Report Title field, enter the name of your report.
- 3. In the Report Items Area, select the report items you wish to include in your report.

Or

To select all of the report items, click **Select All**.

A check appears in all the checkboxes.

- 4. From the Administrators/Operators Area, select the applicable user radio button.
- 5. From the Cardholders Area, select the applicable cardholder radio button.
- 6. In the Date Range Area, enter the date range for the information you wish to include in your report.

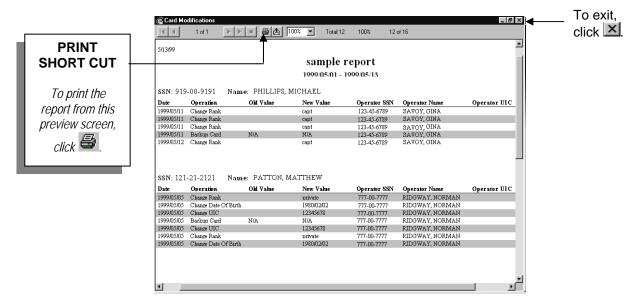
Use the YYYY/MM/DD format (where Y=year, M=month, D=day).

Or

Click the drop-down arrow and select the data from the pop-up calendar.

7. Click Preview.

The report appears on screen.



8. To exit the report screen, click .

The Report Options window appears.

9. To exit the Report Options window, click **Done**.

The Main screen appears.

6.1.1 Administrator/Operator Report Options

The Administrators/Operators Area of the Report Options window allows you report on transactions made by <u>All</u> administrators and operators, administrators only, operators only, or by a specified SSN.

All Displays the selected card modification transactions/records completed

by all administrators and operators.

Administrators Only Displays the selected card modification transactions completed by all

Administrators.

Operators Only Displays the selected card modification transactions completed by all

Operators.

SSN Displays the selected card modification transactions completed by a

specific Administrator or Operator, as specified by their last name and

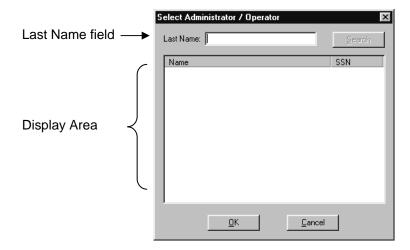
social security number (SSN).

To select the SSN:

For an illustration of the Report Options window, refer to section 6.1.

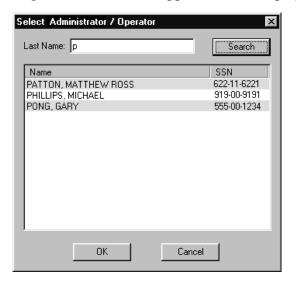
1. From the Administrator/Operators Area, select the SSN radio button.

The Select Administrator/Operator window appears.



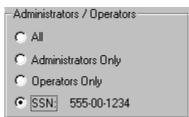
- 2. Enter all or part of the user's last name in the Last Name field.
- 3. Click Search.

A list of user names matching the search criteria appears in the Display Area.



- 4. Select the desired user name.
- 5. Click OK.

The Report Options window appears and the SSN of the selected user appears in the Administrators/Operators Area.

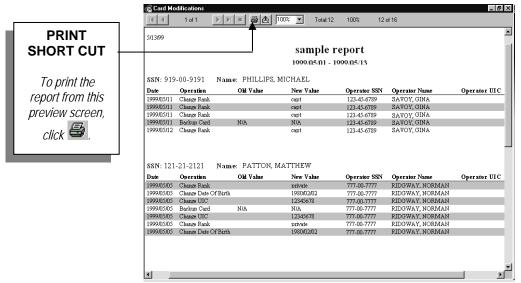


- 6. From the Cardholders Area, select the applicable cardholder radio button.
- 7. In the Date Range Area, enter the date range for the information you wish to include in your report.

Use the YYYY/MM/DD format (where Y=year, M=month, D=day).

8. Click Preview.

The Report screen appears.



9. To exit the Report screen, click .

The Report Options window appears.

10. To exit the Report Options window, click **Done**.

The Main screen appears.

6.1.2 Cardholder Report Options

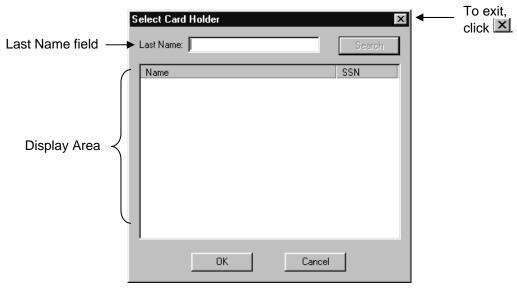
The Cardholders Area in the Report Options window allows you to specify whether all (All) cardholders transactions or a selected cardholder (SSN) transactions should be included in the report.

To select an option, select the cardholder radio button. If SSN is selected, perform the following steps:

For an illustration of the Report Options window, refer to section 6.1

1. From the Cardholder Area, select the **SSN** radio button.

The Select Cardholder window appears.



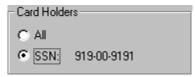
- 2. In the Last Name field, enter all or part of the cardholder's last name.
- 3. Click Search

A list of cardholder names matching the search criteria appears in Display Area.



- 4. Select the desired cardholder name.
- 5. Click **OK**.

The Report Options window appears with the SSN of the selected cardholder displayed in the Cardholders Area.

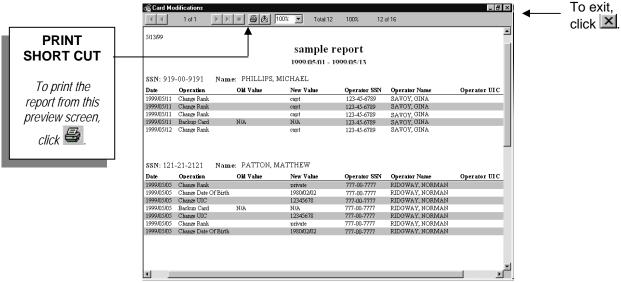


6. In the Date Range Area, enter the date range for the information you wish to include in your report.

Use the YYYY/MM/DD format (where Y=year, M=month, D=day).

7. Click Preview.

The Report screen appears.



8. To exit the Report screen, click .

The Report Options window appears.

9. To exit the Report Options window, click **Done**.

The Main screen appears.

6.2 Print Reports

Administrators and operators with the appropriate privilege can print out customized administrative reports.

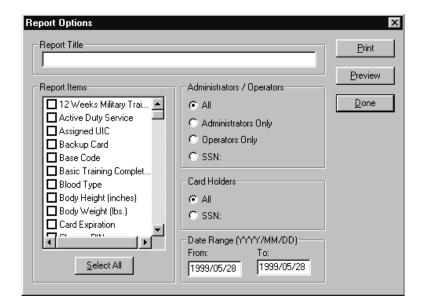
To print a report:

1. From the Menu Bar, select **File** → **Print Reports**.

\mathbf{Or}

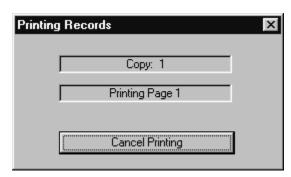
From the Tool Bar, click

The Report Options window appears.



- 2. Enter the Report Title and select the desired report criteria. (For further instructions, see section 6.1.)
- 3. Click **Print**.

The Printing Records window appears. The application prints the report.



When the print job is complete, the Report Options window appears.

4. To exit the Report Options window, click **Done**.

The Main screen appears.

7 APPENDICES

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Appendix A - Troubleshooting

PROBLEM/ QUESTION	POSSIBLE CAUSE/ANSWER	SOLUTION
The card reader is having trouble reading the card.	Card is inserted improperly. Dirt or grease buildup may be present on the smart card.	Remove the smart card and insert it correctly. Remove, clean with a soft dry cloth and reinsert the smart card. Contact the system administrator if the reader still does not recognize the card.
The smart card locked when the PIN was entered.	Some smart cards are designed to "lock" after the user makes a certain number of unsuccessful attempts to enter the card's PIN. (This is a security feature.)	The number of unsuccessful attempts needed to lock the card depends upon the type of card system used. CAC cards lock after 3 unsuccessful attempt to enter the card's PIN. Contact the system administrator to unlock the card.
What if the smart card is removed while an Administrator/Operat or is logging onto the application?	The logon process will fail.	Reinsert the smart card, begin logging on, and do not remove the card until logon is complete.
What if the user's smart card is removed before the card is updated?	The following message appears: Data Not Saved Changes made to this card have not been saved. Please reinsert the card to have the data saved or hit cancel to continue without saving.	Reinsert the user's smart card. The update card process begins automatically.
The Administrator/Operat or can perform some card maintenance functions but not others.	The privilege to perform certain functions has not been added to the specified user.	Add the privilege to the Administrator or Operator's privileges list in the database. For more information, see section 3.2.

Appendix B - Error Messages

ERROR MESSAGE	EXPLANATION
Invalid pin. Card data unchanged.	The user PIN entered is not valid and the card information is not updated.
Error writing to card. Card data unchanged.: Error: 0, Success!	An error occurred while attempting to update card data.
No backup exists for: 555-66-7777 LIPFORD, PAUL This card cannot be restored.	Card data cannot be restored to the smart card because there is no backup file for the user in the database.

Appendix C - Card Maintenance Screens

SCREEN	INFORMATION DISPLAYED								
	Gender Eye Color Body Weight (lbs.)	Hair Color Body Height (inches) Weight Check Date							
Personal Info 1	Citizenship Religion Code Lives on Base	Card Expiration Blood Type Base Code							
Personal Info 2	Number of Children Number of Dependents Sole Surviving Family Member Exceptional Family Member Family Care Plan Required Term of Active Service Expiration	Children Updated Dependency Updated Sole Surviving Family Member Family Member Briefing Family Care Plan Update Sure Pay Status							
Personal Info 3	Base Code Date of Birth	Sponsor ID Place of Birth							
Duty	Duty Address 1 Duty City Duty Zip Duty Email Duty Section Duty UIC	Duty Address 1 Duty State Duty County Duty Phone Duty Status							
Spouse	Marital Status Spouse First Name Spouse Address 1 Spouse City Spouse Zip Spouse Phone	Spouse Last Name Spouse Middle Name Spouse Address 2 Spouse State Spouse Country Spouse Branch							
Organizational 1	USAFA Class Year Alert End Date Alert Start Date	USAFA Squadron Alert Group							
Organizational 2	Rank Pay Grade Projected Rotation Work Center Assigned UIC Department	Meal Entitlement Code Primary MOS Reported for Assignment Active Duty Service Command Division							

SCREEN	INFORMATION DISPLAYED							
Legal	Finance Allotment Update Legal Office Visited (UIC) Passport Expired Security Clearance Investigation Sexual Harassment Awareness Civil Matter Counseling	Legal Info Last Update Legal Will Update Power of Attorney Update Service Group Life Insurance Civil Felony Charges						
Residence	Residence Address 1 Residence City Residence Zip Residence Email	Residence Address 2 Residence State Residence Country Residence Phone						
Military Assignment	Flight Status Military Career Code 2 Military Career Code 4 Processing Chalk ULN: Position Number	Military Career Code 1 Military Career Code 3 Military Career Code 5 Projected Departure						
Readiness 1	Geneva Training Law Brief Country Peace Corps Country POW Country Record of Emergency Data 12 Weeks Military Training	Key Personnel Data Review Local Law Briefing Peace Corps Service POW Waiver Terrorist Briefing Basic Training Completed						
Readiness 2	Hearing Aid Checked Medical Deployability Date Medical Screening PULHES MMRB Run Training Spectacles Checked	Med Assignment to Quarters Exp Medical Deployability Status Pregnancy Status Pull-up Training Sit-up Training Drug Review						
Readiness 3	ID Card Last Checked Gas Mask Inserts Checked Pistol Qual Weapons Qual Conscientious Objector Approval Deadly Force Briefing	ID Tags Last Checked Original Citizenship Country Rifle Qual Cmdr Restriction on Deployability End of Active Service Deadly Force Briefing Time						
Readiness 4	Deployment Code Admin Exp Deployment Code Legal Deployment Code Physical Deployment Code Time Post-Deploy Health Assessment Pre-Deploy Health Assessment	Deployment Code Administrative Deployment Code Legal Exp Deployment Code Physical Exp Deployment Code Time Exp Post-Deployment Referral Pre-Deployment Referral						
Readiness 5	Eyeglasses Required Fitness Exempt Code Exp Fitness Status Gas Mask Inserts Required	Fitness Exempt Fitness Score Fitness Status Code Security Clearance Level						

Appendix D - Rank and Pay Grades

	USMC		US	N	US	SA	USAF		
Pay Grade	Rank	Abrv.	Rank	Abrv.	Rank	Abrv.	Rank	Abrv.	
E00	Marine Aviation Cadet	MARCAD							
E01	Private	NONNCO	Seaman Recruit	NON-PO	Private	PVT	Airman-Basic	AMN	
E02	Private First Class	NONNCO	Seaman Apprentice	NON-PO	Private	PVT	Airman	AMN	
E03	Lance Corporal	NONNCO	Seaman	NON-PO	Private First Class	PVT	Airman First Class	AMN	
E04	Corporal	CPL	Petty Officer 3d Class	PO3	Corporal / Specialist	CPL / SPC	Senior Airman/ Sergeant	SRA SGT	
E05	Sergeant	SGT	Petty Officer 2d Class	PO2	Sergeant	SGT	Staff Sergeant	SSGT	
E06	Staff Sergeant	SSGT	Petty Officer 1st Class	PO1	Staff Sergeant	SSG	Technical Sergeant	TSGT	
E07	Gunnery Sergeant	GYSGT	Chief Petty Officer	СРО	Sergeant First Class	SFC	Master Sergeant	MSGT	
E08	First Sergeant / Master Sergeant	1STSGT / MSGT	Senior Chief Petty Officer	SCPO	First Sergeant / Master Sergeant	1SG / MSG	Senior Master Sergeant	SMSGT	
E09	Sergeant Major / Master Gunnery Sergeant	SGTMAJ/ MGYSGT	Master Chief Petty Officer	МСРО	Sergeant Major / Command Sergeant Major	SGM / CSM	Chief Master Sergeant	CMSGT	
WO1	Warrant Officer	WO1	Warrant Officer	WO	Warrant Officer	WO1			
WO2	Chief Warrant Officer	CWO2	Chief Warrant Officer	CW2	Chief Warrant Officer	CW2			
WO3	Chief Warrant Officer	CWO3	Chief Warrant Officer	CW3	Chief Warrant Officer	CW3			

	US	MC	US	N	US	SA	USAF		
Pay Grade			Rank	Abrv.	Rank	Abrv.			
WO4	Chief Warrant Officer	CWO4	Chief Warrant Officer	CW4	Chief Warrant Officer	CW4			
WO5	Chief Warrant Officer	CWO5			Master Warrant Officer	MW5			
O01	Second Lieutenant	2NDLT	Ensign	ENS	Second Lieutenant	2LT	Second Lieutenant	LT	
O02	First Lieutenant	1STLT	Lieutenant (jr grade)	LTJG	First Lieutenant	1LT	First Lieutenant	LT	
O03	Captain	CAPT	Lieutenant	LT	Captain	СРТ	Captain	CAPT	
O04	Major	MAJ	Lieutenant Commander	LCDR	Major	MAJ	Major	MAJ	
O05	Lieutenant Colonel	LTCOL	Commander	CDR	Lieutenant Colonel	LTC	Lieutenant Colonel	LTCOL	
O06	Colonel	COL	Captain	CAPT	Colonel	COL	Colonel	COL	
O07	Brigadier General	BGEN	Rear Admiral - Lower Half	RADM	Brigadier General	BG	Brigadier General	BGEN	
O08	Major General	MAJGEN	Rear Admiral - Upper Half	RADM	Major General	MG	Major General	MAJGEN	
O09	Lieutenant General	LTGEN	Vice Admiral	VADM	Lieutenant General	LTG	Lieutenant General	LTGEN	
O10	General	GEN	Admiral	ADM	General	GEN	General	GEN	

Appendix E - DOD Non-Appropriated Funds (NAF) Rank* and Pay Grades

NA	Pay	NL	Pay	NS	Pay	AS	Pay	PS	Pay	GSE	Pay
Rank	Grade	Rank	Grade								
NA01	N01	NL01	N01	NS01	N01	AS01	A01	PS01	P01		
NA02	N02	NL02	N02	NS02	N02	AS02	A02	PS02	P02	GSE02	G02
NA03	N03	NL03	N03	NS03	N03	AS03	A03	PS03	P03	GSE03	G03
NA04	N04	NL04	N04	NS04	N04	AS04	A04	PS04	P04	GSE04	G04
NA05	N05	NL05	N05	NS05	N05	AS05	A05	PS05	P05		
NA06	N06	NL06	N06	NS06	N06	AS06	A06	PS06	P06		
NA07	N07	NL07	N07	NS07	N07	AS07	A07	PS07	P07		
NA08	N08	NL08	N08	NS08	N08						
NA09	N09	NL09	N09	NS09	N09						
NA10	N10	NL10	N10	NS10	N10						
NA11	N11	NL11	N11	NS11	N11						
NA12	N12	NL12	N12	NS12	N12						
NA13	N13	NL13	N13	NS13	N13						
NA14	N14	NL14	N14	NS14	N14						
NA15	N15	NL15	N15	NS15	N15						
				NS16	N16						
				NS17	N17						
				NS18	N18						
				NS19	N19						

Appendix F - DOD Appropriated Funds Rank* and Pay Grades

GS Rank	Pay Grade	GM Rank	Pay Grade	SES Rank	Pay Grade	WG Rank	Pay Grade	WL Rank	Pay Grade	WS Rank	Pay Grade	WD Rank	Pay Grade	WN Rank	Pay Grade
GS01	G01		32440	SES01	S01	WG01	W01	WL01	W01	WS01	W01	WD01	W01	WN01	W01
GS02	G02			SES02	S02	WG02	W02	WL02	W02	WS02	W02	WD02	W02	WN02	W02
GS03	G03			SES03	S03	WG03	W03	WL03	W03	WS03	W03	WD03	W03	WN03	W03
GS04	G04			SES04	S04	WG04	W04	WL04	W04	WS04	W04	WD04	W04	WN04	W04
GS05	G05			SES05	S05	WG05	W05	WL05	W05	WS05	W05	WD05	W05	WN05	W05
GS06	G06					WG06	W06	WL06	W06	WS06	W06	WD06	W06	WN06	W06
GS07	G07	GM07	G07			WG07	W07	WL07	W07	WS07	W07	WD07	W07	WN07	W07
GS08	G08	GM08	G08			WG08	W08	WL08	W08	WS08	W08	WD08	W08	WN08	W08
GS09	G09	GM09	G09			WG09	W09	WL09	W09	WS09	W09	WD09	W09	WN09	W09
GS10	G10	GM10	G10			WG10	W10	WL10	W10	WS10	W10	WD10	W10		
GS11	G11	GM11	G11			WG11	W11	WL11	W11	WS11	W11	WD11	W11		
GS12	G12	GM12	G12			WG12	W12	WL12	W12	WS12	W12				
GS13	G13	GM13	G13			WG13	W13	WL13	W13	WS13	W13				
GS14	G14	GM14	G14			WG14	W14	WL14	W14	WS14	W14				
GS15	G15	GM15	G15			WG15	W15	WL15	W15	WS15	W15				
										WS16	W16				
										WS17	W17				
										WS18	W18				
										WS19	W19				

Appendix G – Meal Entitlement Code (MEC)

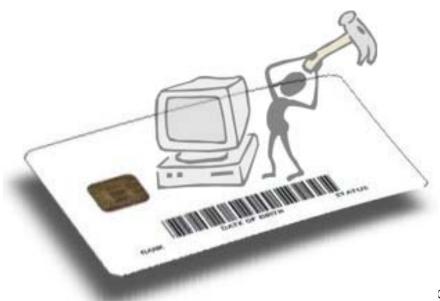
BRANCH	MEAL ENTITLEMENT CODE (MEC)	DESCRIPTI ON	ACRONYM	DEFAULT
USMC	"00"	Subsistence in Kind (SIK)/Rations-in- Kind (RIK)	SIK	
	"01"	Discounted Meal Rate	BAS w/Discount	Duty Status Specific (ex. Dependents of E4 and below, youth groups)
	"02"	Full Meal Rate	BAS	Default for all non-subsistence - Active Duty Officer and Enlisted
USN	"00"	Subsistence in Kind (SIK)/Rations-in- Kind (RIK)	RIK	
	"01"	Discounted Meal Rate	BAS	Duty Status Specific (ex. Dependents of E4 and below, youth groups, flight ops, etc.)
	"02"	Full Meal Rate	BAS w/Surcharge	Default for all non-subsistence - Active Duty Officer and Enlisted
USA	"00"	Subsistence in Kind (SIK)/Rations-in- Kind (RIK)	SIK	
	"01"	Discounted Meal Rate	BAS w/Discount	Duty Status Specific (ex. Dependents of E4 and below, youth groups)
	"02"	Full Meal Rate	BAS	Default for all non-subsistence - Active Duty Officer and Enlisted
USAF	"00"	Subsistence in Kind (SIK)/Rations-in- Kind (RIK)	SIK	
	"01"	Discounted Meal Rate	BAS w/Discount	Duty Status Specific (ex. Dependents of E4 and below, youth groups)
	"02"	Full Meal Rate	BAS	Default for all non-subsistence - Active Duty Officer and Enlisted

INDEX \boldsymbol{A} Add Administrator / Operator P B PIN Back Up 31 \boldsymbol{C} Print **Card Information** reports 52 Privileges Card Maintenance Utility......2 add......23 Communication Port......14 R Configuration Settings 14 Copying a Smart Card......33 Reports Joint Smart Card to CAC Smart Card... 33 administrator / operator options 48 Recruit Smart Card to Joint Smart Card 33 cardholder options......50 D **Database** archive......41 S Deleting Records......44 I Starting System Requirements...... 6 Install \boldsymbol{U} Card Maintenance Utility...... 6 Update MEC 37 \boldsymbol{L} \boldsymbol{V} Logging On 16 View M Main Screen 8



CARD MAINTENANCE UTILITY

Troubleshooting Guide Version 3.06 Revision a



CT 2003

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OVERVIEW

This Troubleshooting Guide illustrates various situations to assist the user in performing some system checks prior to contacting the system administrator.

2 TROUBLESHOOTING PROCEDURES

Problem Description	POSSIBLE CAUSE	SOLUTION
	Card is inserted improperly.	Remove the smart card and insert it correctly.
2.1 Error Reading Card Card Maintenance Utility Error reading card	Dirt or grease buildup may be present on the smart card.	Remove, clean with soft dry cloth and reinsert the smart card.
Deta was sent to the reader, but no response was received [CBsmartCS::ReadData-3 [-61]]	Chip is damaged.	Have card reissued.
		Contact the system administrator if the reader still does not recognize the card.
	An incorrect PIN has been entered for the card.	Have the cardholder carefully enter the PIN again.
2.2 Incorrect PIN Card Maintenance Utility		The PIN for a Common Access Card is between 6 and 8 <u>numeric</u> characters. The PIN on a Joint Services Smart card is between 4 and 8 <u>alphanumeric</u> characters.
Error reading card Incorrect PIN.	The keypad does not have Num Lock activated.	Check the keypad for Num Lock On.
	The keypad is faulty.	Replace the keypad.
		If the problem occurs with all subsequent cards, close and restart Card Maintenance Utility. Logon. If the problem continues, contact the system administrator.

Problem Description	POSSIBLE CAUSE	SOLUTION
	the card several consecutive times and the card has been locked. service is supported by the issuing agency. Smart cards are typically designed to lock after several consecutive	have the PIN Unlock. This service is supported by the
2.3 PIN is locked Card Maintenance Utility Error reading card		several consecutive unsuccessful presentations
PIN Locked. Please notify card issuing agency.		Some cards become locked after three consecutive incorrect PIN entries.
		Contact the system administrator if the reader still does not recognize the card.
2.4 Administrator or Operator login fails Card Maintenance Utility You do not have privileges to this application. You must have an administrator grant you access before using the application.	The cardholder is not registered as an Administrator or Operator in the Card Maintenance Utility on the machine.	See the administrator of the Card Maintenance Utility for that machine.
Card Maintenance Utility User not granted access. Please check that this is a valid administrator or operator card. Error reading card Data was sent to the reader, but no response was received [CBsmartCS::SetPin-2 (-61)]	The Administrator or Operator card was removed prior to completion of the login process.	Reinsert the smart card, begin logging on, and do not remove the card until logon is complete.

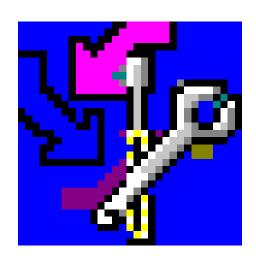
Problem Description	POSSIBLE CAUSE	SOLUTION
2.5 Not able to save data to the card Card Maintenance Utility Card data unchanged.	The card being updated is not the same card that was read.	Reinsert the source data user's card. The update card process begins automatically.
Latio data unchanged. Error writing to card Attempted to change cards without closing the previous card [CDataManager::Validate-1]		If you do not want to save the data to the smart card, select Cancel.
2.6 Check reader/port settings warning Card Maintenance Utility Please check reader/port settings. Enor initializing card system A reader plugan could not be found to match the current hardware configuration [CD ataManager: GetInterfaces-1]	During the startup of Card Maintenance the utility checks for the smart card reader and cannot find it on the port selected in the application.	Ensure that a smart card reader is correctly connected to the computer with an adequate power supply. Select OK.
2.7 Database Exception / Could not open primary database Card Maintenance Utility Database Exception: Could not find file '(unknown)!: Driver's SQLSetConnectAttr failed Could not open the primary database. Please check that the database selected is the Card Maintenance Utility database and that you have write permissions to it.	The application cannot find the primary database for Card Maintenance Utility.	Select OK at the bottom of the warning message. The Settings screen provides a Browse button from which to select the primary database path. The default location is c:\Program Files\MAXIMUS\Card Maintenance Utility\maintenance.mdb.

Problem Description	POSSIBLE CAUSE	SOLUTION
	The primary database is not located at c:\Program Files\MAXIMUS\Card Maintenance Utility.	Contact the Card Maintenance Utility administrator for information on the database name and location.
2.8 Application logs the operator out after 15 minutes of idle operation Card Maintenance Utility System has been idle for 15 minutes. Operator has been automatically logged off.	No action has occurred within Card Maintenance Utility for 15 minutes, therefore; the application automatically logs out the operator.	Select OK and the warning message will disappear. To continue use of the utility the operator must log on again.
2.9 Administrator or Operator cannot perform some card maintenance functions	The privilege to perform certain functions has not been assigned.	Add the desired privileges to the Administrator or Operator's assigned privileges list in the database. **Motioner Picture** **Coret Access Pickings** **



CARD MAINTENANCE UTILITY

Installation and Setup Guide Version 3.06 Revision a



Card Maintenance Utility

1.1 APPLICATION INSTALLATION

WARNING! THE COMPUTER WILL REBOOT AT THE END OF THE CARD MAINTENANCE UTILITY INSTALLATION. TO PROTECT WORK, PLEASE MAKE SURE TO CLOSE ALL FILES AND OTHER APPLICATIONS BEFORE RUNNING THE INSTALLATION SOFTWARE.

Persons performing the Card Maintenance Utility installation must have administrative rights on the computer.

- Insert the Card Maintenance Utility installation CD into your computer's CD-ROM drive.
- 2. Open Explorer or My Computer.
- 3. Access the files on the CD by double clicking on the CD-ROM drive.
- 4. Locate the file, **Setup.exe**.
- 5. To start the installation, double click on **Setup.exe**.





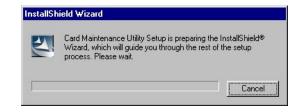
6. The InstallShield wizard window is displayed like the one shown on the right.

It will take a few moments for the install software to run checks on the machine.

If you do not have required software installed (listed at the beginning of this guide) or if you do not have administrative privileges on the computer, the install displays a message identifying the problem and then stops the installation.

When all the appropriate versions of all required software are installed and administrative privileges are present, run the Card Maintenance Utility install again.

- 7. Successful machine check results start the Card Maintenance Utility Welcome screen.
- 8. From the Welcome window, click **Next**.

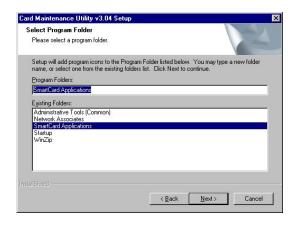




9. From the Choose Destination Location window, click **Next**.



10. At the Select Program Folder window, click **Next**.



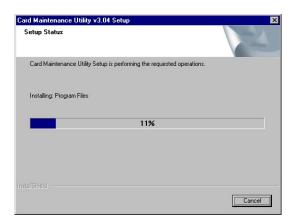
- 11. A progress bar window is displayed on the screen as the install setup program transfers files to your machine.
- 12. Messages are displayed detailing what the machine is installing, updating or removing. The screen flickers briefly as various system updates are run.

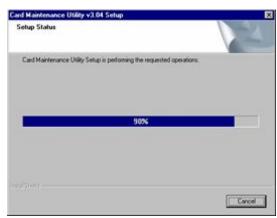
Updates may take a few moments to finish.

13. The progress bar window stays on the screen as the install setup program removes old application files and registry settings, installs databases and creates a backup file directory.

14. From the Installation Wizard Complete screen, click **Finish**.

The install is complete and the machine may reboot.





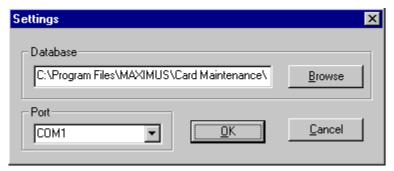
Configure the Settings

For the application to function properly, the Card Maintenance Utility settings must be configured. The settings include:

Database Specifies the location of the Card Maintenance Utility database within the computer.

Port Specifies the communications port to which the smart card reader is attached.

The first time the application starts, the Settings window appears automatically. Subsequently, the settings can be changed at any time using the Settings command.



To configure the settings:

- 1. To configure the Database location:
 - a. In the Database field, enter in the full name and path of the Card Maintenance Utility database (maintenance.mdb).

Or

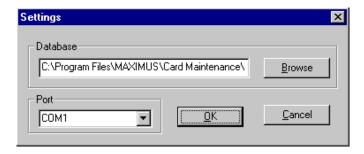
b. Click **Browse**.

The Open window appears.



- 1) In the Look In field, select the location of the database.
- 2) From the Display Area, select the applicable database file name. The database file name appears in the File name field.
- 3) Click Open.

The Settings window appears with the database file name displayed in the Database field.



2. From the Port drop-down list, select the port connection that the card read is attached to.

Or

If PC/SC is installed, select the type of reader that is connected.

NOTE: IF PCSC IS INSTALLED ON THE COMPUTER, THE PORT DROP-DOWN LIST CONTAINS A SELECTION FOR THE TYPE OF CARD READER THAT IS ATTACHED. THE **TYPE** OF CARD READER MUST BE SELECTED FROM THIS LIST.

3. After the configuration settings are complete, click OK. The Main screen appears.

Log On

The initial access to the Card Maintenance Utility application requires the use of the Application Card provided with the application.

After the initial access, the Card Maintenance Utility functions are accessed by the log on of an Administrator or Operator. (See section 3.2 for information on designating users as Administrators and Operators.)

To Login to Card Maintenance Utility:

1. From the Menu Bar, select File → Operator Logon.

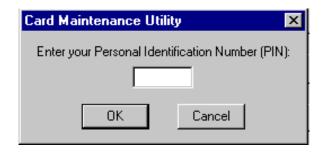
Or



The Insert Smart Card dialog box appears.

2. Insert your smart card into the card reader.

The Enter PIN window appears.



3. Enter your PIN in the field.

NOTE: IF USING THE APP CARD FOR AN INITIAL LOG ON, USE THE APP CARD'S PIN.

WARNING: THE SUBMISSION OF <u>THREE</u> CONSECUTIVE INCORRECT PINS WILL AUTOMATICALLY LOCK THE CARD AND RENDER IT UNUSABLE.

4. Click **OK**.

Your PIN is verified when the Remove Smart Card dialog box appears.

Or

If your PIN is not verified, the Invalid PIN dialog box appears and requires the following action:

- a. Click OK.
 - The Remove Smart Card dialog box appears.
- b. Remove your smart card from the reader, and begin the log on process again.

 If the Invalid PIN dialog box continues to appear, refer to section **4.2**, Changing a PIN.
- 5. Remove your smart card from the reader when the Remove Smart Card dialog box appears.

Overview

To ensure the integrity and security of the Card Maintenance Utility data, only administrators and operators with the appropriate privileges can access the application's functions. The user designation types include:

Administrator Administrators can log on, and they have access to application functions

according to their specified privileges. (See section 3.5 for information on

adding privileges.) They can also designate users as Operators or

Administrators.

Operator Operators can log on, and they have access to application functions according

to their specified privileges. (See section 3.5 for information on adding

privileges.)

A special Application Card is included with the application. This special Application Card is a smart card that allows initial access to the application's functions. The Application Card should be used only to designate the **initial** Administrator.

As an Administrator, you can perform the following:

- Designate others as Administrators or Operators.
- □ Specify the access privileges for each type of user (i.e., Administrators and Operators).

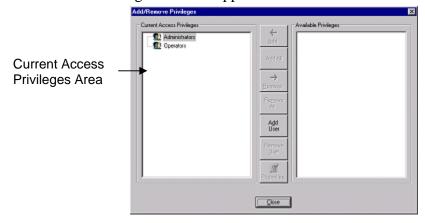
Adding Administrators and Operators

To add users (i.e., Administrators or Operators), an Administrator must be logged onto the application. For more information about logging on, see section 2.6.

To add a user:

1. From the Menu Bar, select **File** → **Modify Privileges**.

The Add/Remove Privileges window appears.



- 2. In the Current Access Privileges Area, select the applicable type of privilege in which to associate the cardholder, **Administrator** or **Operator**.
- 3. Click Add User.

The Insert smart card dialog box appears.

4. Insert the cardholder's smart card into the card reader. (Depending on the card type, a PIN may be required to read the card. If required, have the cardholder enter their PIN.)

The User Properties window appears, as shown in the following figure.



NOTE: THE APPLICATION AUTOMATICALLY SETS THE EXPIRATION DATE FOR ONE YEAR AFTER THE DATE SET ON THE COMPUTER. THE EXPIRATION DATE IS THE DATE THAT THE PRIVILEGES BECOME INACTIVE AND THE CARDHOLDER CAN NO LONGER ACCESS THE APPLICATION.

5. If applicable, enter the new expiration date in the Expiration Date field, using the YYYY/MM/DD format (where Y=year, M=month, D=day).

Or

Click the drop-down arrow and select the data from the pop-up calendar.

6. Click OK.

The Remove smart card dialog box appears.

7. Remove the smart card from the reader.

The Add/Remove Privileges window appears. The Administrator/Operator is added to the database.

8. To return to the Main screen, click **Close**.

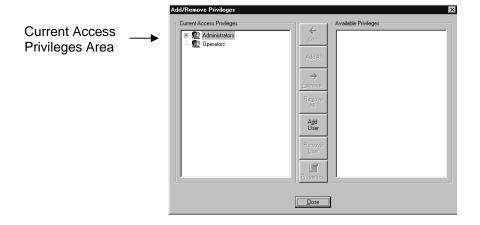
Removing Administrators and Operators

To remove users (i.e., Administrators or Operators), an Administrator must be logged onto the application (For more information about logging on, see section 2.6.)

To remove a user:

1. From the Menu Bar, select **File** → **Modify Privileges**.

The Add/Remove Privileges window appears.



- 2. In the Current Access Privileges Area, expand the applicable directory (i.e., Administrator or Operator).
- 3. Select the desired user name.
- 4. Click Remove User.

A warning dialog box appears.

NOTE: REMOVING THE ADMINISTRATOR OR OPERATOR WILL REMOVE THEIR ACCESS PRIVILEGES TO THE APPLICATION.

5. Click Yes.

The Add/Remove Privileges window appears. The selected user no longer appears in the Add/Remove Privileges window.

6. To return to the Main screen, click Close.

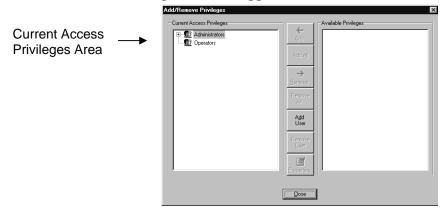
Changing Expiration Dates

After an Administrator or Operator has been added to the database, their privileges expiration date can be changed at any time. Only an Administrator logged onto the application can perform this function. (For more information about logging on, see section 2.6.)

To change the expiration date:

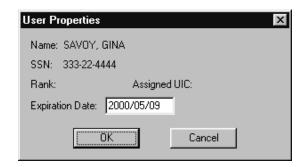
1. From the Menu Bar, select **File → Modify Privileges**.

The Add/Remove Privileges window appears.



- 2. In the Current Access Privileges Area, expand the applicable directory (i.e., Administrator or Operator).
- 3. Select the desired user name.
- 4. Click **Properties**.

The User Properties window appears.



5. Enter the new expiration date in the Expiration Date field, using the YYYY/MM/DD format.

0r

Click the drop-down arrow and select the data from the pop-up calendar.

6. Click OK.

The Add/Remove Privileges window appears. The new expiration date is saved to the database.

7. To return to the Main screen, click **Close**.

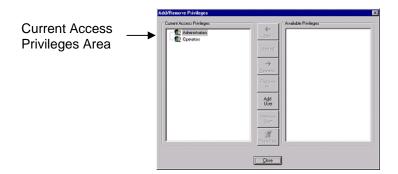
Add Privileges

The Add Privileges function allows administrators to designate which specific application functions can be accessed by a cardholder. Only the privileges an administrator records to a cardholder's smart card can be accessed by the cardholder therefore restricting the cardholder from all other functions within the application.

To add privileges:

1. From the Menu Bar, select **File** → **Modify Privileges**.

The Add/Remove Privileges window appears.

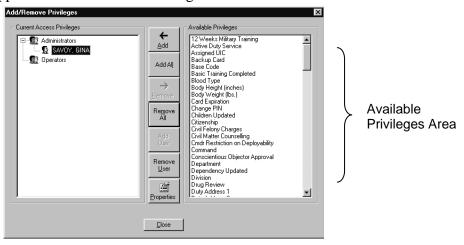


2. In the Current Access Privileges Area, expand the applicable directory (i.e., Administrator or Operator).

The directory expands, and lists of user names appear.

3. Select the desired user name.

The user privileges appear in the Available Privileges Area.



4. Select the privilege(s) you wish to add.

The selected privilege(s) is highlighted.

To deselect a privilege, select the privilege until the highlight disappears.

NOTE: USERS CAN BE GRANTED ALL THE PRIVILEGES AVAILABLE OR ONLY SPECIFIC ONES.

5. Click Add.

The privileges are added to the selected user name.

The added privileges disappear from the Available Privileges Area.

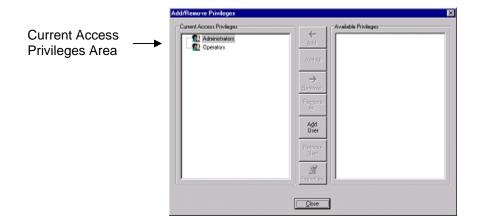
NOTE: TO ADD ALL OF THE PRIVILEGES TO THE USER'S SMART CARD, CLICK **ADD ALL.**

- 6. Repeat steps 3-5 to add privileges to other users.
- 7. To return to the Main screen, click **Close**.

Removing Privileges

8. From the Menu Bar, select **File** → **Modify Privileges**.

The Add/Remove Privileges window appears.



9. In the Current Access Privileges Area, expand the applicable directory (i.e., Administrator or Operator).

The directory expands, and lists of user names appear.

10. Select the desired user name.

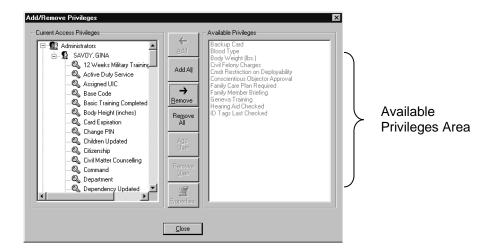
The user name opens, and the user's privileges appear.



11. Select the privilege you wish to remove.

12. Click Remove.

The privilege no longer appears in the Current Access Privileges Area, instead, it appears in the Available Privileges Area. To remove additional privileges, repeat steps 3-5.



NOTE: ONLY ONE PRIVILEGE MAY BE REMOVED AT A TIME.

NOTE: TO REMOVE ALL OF THE PRIVILEGES IN ONE STEP, CLICK **REMOVE ALL**. ALL OF THE PRIVILEGES ARE REMOVED FROM THE USER'S PRIVILEGES LIST AND APPEAR IN THE AVAILABLE PRIVILEGES AREA.

To return to the Main screen, click Close.

NOTE: You have not performed the setup for both the Administrator and Operator. Remember that the setup card will only allow you to input or modify privileges. To check the Card Maintenance Utility functionality you must Logout (and then restart the application and Logon using your CAC as:

- 1. An Administrator (and then logout)
- 2. As an operator

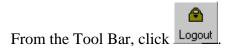
Log Out

Whenever you have completed your Card Maintenance Utility functions, or will be away from the application, it is essential to the security of the application that you log out.

To log out of Card Maintenance Utility:

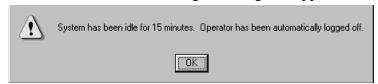
1. From the Menu Bar, select **File** → **Operator Logout**.

Or



You are logged out.

After 15 minutes of Card Maintenance Utility inactivity, the application automatically logs you off the application and the Automatic Logoff dialog box appears.



2. To respond to the message, click OK.

You are logged out, and the Main screen appears.

Log On

After the initial access, the Card Maintenance Utility functions are accessed by the log on of an Administrator or Operator using their personal CAC.

To Login to Card Maintenance Utility:

1. From the Menu Bar, select File → Operator Logon.

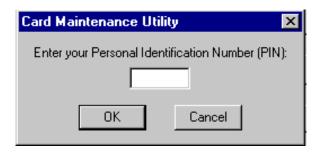
Or



The Insert Smart Card dialog box appears.

2. Insert your CAC into the card reader.

The Enter PIN window appears.



3. Enter your PIN in the field.

WARNING: THE SUBMISSION OF <u>THREE</u> CONSECUTIVE INCORRECT PINS WILL AUTOMATICALLY LOCK THE CARD AND RENDER IT UNUSABLE.

4. Click **OK**.

Your PIN is verified when the Remove Smart Card dialog box appears.

Or

If your PIN is not verified, the Invalid PIN dialog box appears and requires the following action:

- Click OK.
 - The Remove Smart Card dialog box appears.
- c. Remove your smart card from the reader, and begin the log on process again. If the Invalid PIN dialog box continues to appear, refer to section **4.2**, Changing a PIN.
- 5. Remove your smart card from the reader when the Remove Smart Card dialog box appears.
- 6. Check the functionality of the application by Logon as an Administrator using a personal CAC with assigned Administrator privileges.
- 7. Logout of the application.
- 8. Check the functionality of the application by Logon as an operator using a personal CAC with assigned operator privileges.
- 9. The Card Maintenance Utility is now functionally checked and you should Logout of the application.

Log Out

Whenever you have completed your Card Maintenance Utility functions, or will be away from the application, it is essential to the security of the application that you log out.

To log out of Card Maintenance Utility:

1. From the Menu Bar, select **File** → **Operator Logout**.

Or



From the Tool Bar, click Logout

You are logged out.

After 15 minutes of Card Maintenance Utility inactivity, the application automatically logs you off the application and the Automatic Logoff dialog box appears.



2. To respond to the message, click OK.

You are logged out, and the Main screen appears.



MAINTENANCE UTILITY

Training Guidance
Version 3.06
Revision a

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Agenda

The training about to be performed is designed for two types of students, administrators and operators. Administrator students will complete the actual installation and thoroughly operate the Card Maintenance Utility software. Administrative students will be guided through the process of installing the program, configuring the settings by designating the location for the Card Maintenance Utility database, and shown how to determine the port settings which creates the communication connection between the smart card, card reader and the computer application. An App Card programmed with full privilege to access all of the application's functions will be supplied to the administrative students. Using the App Card, administrative students will be instructed how to assign privileges to other administrators or operators. Those assigned privileges will determine the specific information, that the designated administrator or operator will have access to within the application. Once both administrator and operator students log on to the application, an overview of the Main Window, its components and the types of displays encountered during the application's use will be addressed. Administrator and operator students will be trained to perform all card maintenance functions, database operations, and report generation; however, when the application is implemented for job related duties the functions an operator will actually have access to will be determined by the privileges assigned to him/her by an administrator.

What is a Smart Card

A smart card is the size of a standard credit card, and contains an integrated circuit (IC) chip embedded in its plastic. The IC chip contains a microprocessor that securely stores, processes, and updates data. This allows the smart card to manage valuable information (personal, military service, insurance, eligibility, employer, emergency medical and contact information), process transactions, and authenticate identity, and access networks or databases.

A smart card acts as a portable storage device that prevents unauthorized reading of, or changes to the data it carries. Since a smart card is a computer, it is a programmable device. Smart cards allow for extremely high levels of security because of cryptographic techniques used to encode and decode all communications between the smart card and other devices. In addition to high levels of security, smart cards have the ability to combine interfaces to many applications together in a single card.

- The CAC will require the cardholder to enter the PIN.
- A PIN is required to write to the card
- The submission of several consecutive incorrect PINs will automatically lock the card and render it unusable.
- The 8K smart card and CAC will be referred to as the service member's smart card.

Instructor Information

General

The Card Maintenance Utility Instructor's Guide is designed to provide a logical course of instruction to facilitate the training of administrators and users in the installation, setup, use and maintenance of the Card Maintenance Utility application. This outline should be used in conjunction with the Card Maintenance Utility Administrator's guide version 3.10. Instructors utilizing this outline should possess a working knowledge of the Card Maintenance Utility application. It is recommended that instructors thoroughly familiarize themselves with the contents of this outline and the Card Maintenance Utility Administrator's guide before conducting instruction.

Use

This outline provides the instructor a dialog with which to communicate general comments, explanations of screen displays and tasks to be performed by students. All italicized bullets identify a task or step to be performed by the student. When practical, students will be referenced to the Administrator's guide to complete steps required to accomplish a particular task.

Both manuals assumes that all users:

- Are familiar with working in the Windows operating systems, including Windows 95, Windows 98 or Windows NT
- Are able to find and open files
- Are able to select options from check boxes, buttons, and drop down lists
- Are able to use online help

Considerations

This outline assumes that each student has access to the system requirements identified in this outline. A copy of the Card Maintenance Utility Administrator's guide should be provided to each student and a minimum of 10 populated smart cards should be available for each five students being trained. Unless the application is to be installed from a network server, one installation CD should be available for each system used in training. Whenever possible, the UIC and parent level organization designation should also be populated on the student's smart card due to the time required.

The installation of this application, whether in a networked or non-networked environment, coordination with the local System Administrator is advised. In addition, a printer would be useful but not necessary for training purposes.						

Introduction

Instructor introductions:

Objective

This course of instruction is designed to train both administrators and operators in use of the Card Maintenance Utility application. Upon completion of this course, administrators and operators will have performed all the functions presented in this application that pertain to that particular student's privilege access level.

Card Maintenance Utility Overview

Card Maintenance Utility is a software application used to update cardholder information on smart cards.

What Are the Benefits of Card Maintenance Utility?

The benefits of the Card Maintenance Utility application include:

•	Efficiency	Quickly change a cardholder's information when the need arises.	
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Use one application to change cardholder information on two different types of active smart

cards.

• Security Requires application users to be registered as Operators or Administrators to log on.

Controls access to application functions through the assignation of application use privileges.

• **Reduced Paperwork** Automatically stores smart card information in the database.

• **Simplicity** PCSC compatibility enables the program to interface with all types of card readers.

How Does Card Maintenance Utility Work?

The following individuals use the Card Maintenance Utility application in one of the following capacities:

Cardholders - These individuals <u>cannot</u> log on to the application. However, they may request to have various aspects of their smart card data modified.

Operators - These individuals can log on to the application. They are assigned privileges, by the administrator, which allows them to perform only the cardholder modification functions designated by the administrator.

Administrators can log on to the application. They can create new Administrators and Operators. They can assign access privileges to themselves and others can perform all cardholder modification functions.

As an Administrator or Operator, you can use Card Maintenance Utility to update smart card information for a cardholder. You can change a cardholder's PIN, back up the cardholder's data in the database, and move cardholder data to a new smart card.

Card Maintenance Utility has active and archive databases. The active database keeps a record of all Operators and Administrators. It also keeps a record of all current cardholder modifications. Older cardholder modifications can be moved to the archive database. This keeps the application streamlined and performing at optimal levels.

Card Maintenance Utility allows you to create customized administrative reports. The application allows you to select topics, dates, and individuals to include in your reports. These reports may be viewed and/or printed.

System Requirements

In order to work properly, Card Maintenance Utility requires the following software and hardware components:

- Microsoft Windows 95/98 or Windows NT 4.0 operating system
- Service Pack 4 or higher (for Windows NT 4.0)
- 16 MB RAM
- 300 KB of free hard disk space
- Smart Card Reader
- App Card (supplied with the application; used for initial start up only)
- Common Access Card (CAC)
- Printer (optional, to print reports)

Install Card Maintenance Utility

7.1.1.1.1.1

General

The Card Maintenance Utility application may be installed from a CD ROM or Floppy Disk. The installation process is similar to other Windows-based applications.

> Refer students to Administrator's guide – pg. 6, sec. 2.2. Perform steps 1-2 (as determined by installation method).

Note:

The computer must be restarted upon completion of installation.

Start Card Maintenance Utility

7.1.1.1.1.2

General

The executable (.exe) file which starts the Card Maintenance Utility application may be accessed through a number of different methods such as My Computer, Windows / Windows NT Explorer, Shortcuts etc. The **Administrator's guide** demonstrates the **Start** menu method

Refer students to Administrator's guide – pg. 7, sec. 2.3.

Note:

When Card Maintenance Utility is started for the first time, the Application Settings screen is automatically displayed.

Application Settings (Administrators Only)

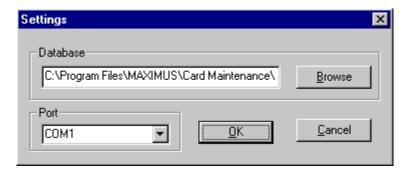
7.1.1.1.1.3

General

The first time the Card Maintenance Utility starts, the application settings must be configured. Subsequently, the application settings can be changed at any time from the Menu Bar.

The application settings include the following:

• Database -Requires you to specify the location of the Card Maintenance Utility.

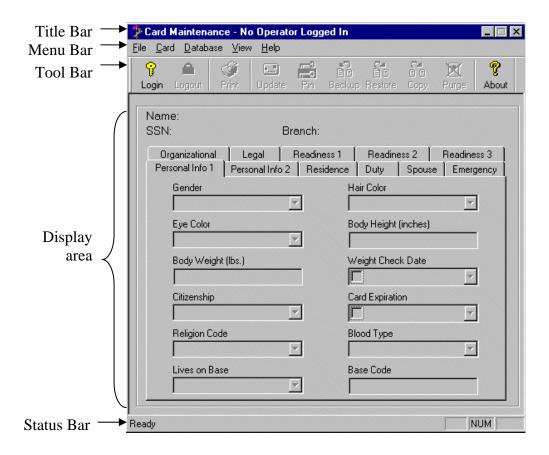


- Port Setting- Requires that you specify the communication port that connects the computer to the smart card reader.
 - ➤ Refer students to Administrator's guide pg. 17-18, sec.2.5. Perform steps 1-3.

Main Window

The Main window allows you to perform the main functions of the application. The following figure identifies the main components of the Main window.

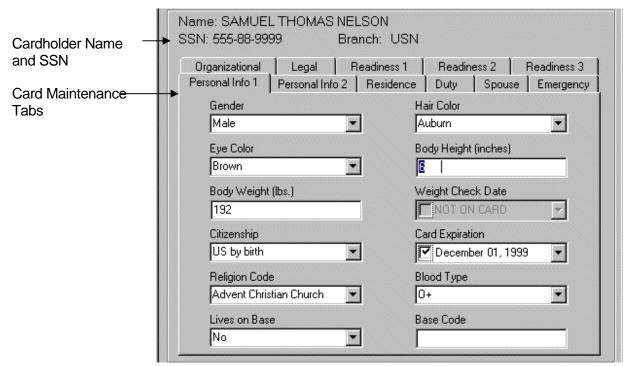
➤ Refer students to Administrator's Guide – pg. 8, sec. 2.4. Explore all of the menus and point out feature locations.



Display Area

General

The Display Area changes according to the tab selected to display a current cardholder's information.



older Name and SSN

➤ Refer students to Administrator's guide – pg. 15, sec.2.4.3.

Special App Card (Administrators Only)

A special App Card is included with the application. This special App Card is a smart card that allows initial access to the application's functions. The App Card should be used only to assign the **initial** Administrator.

Log On

To access the Card Maintenance Utility functions, an administrator or operator must log on.

Instruct students how to log on using the menu or tool bar icon. Login



➤ Refer students to Administrator's guide – pg. 19, sec.2.6.

Note:

Use the supplied special App Card for the initial log on, and type the App Card's PIN when requested for a PIN.

Log Out

Whenever you have completed your Card Maintenance Utility functions, or will be away from the application, it is essential to the security of the application that you log out.

Instruct students how to log out using the menu or tool bar icon. Logout



➤ Refer students to Administrator's guide – pg. 20, sec.2.7.

Administrators and Operators (Administrators Only)

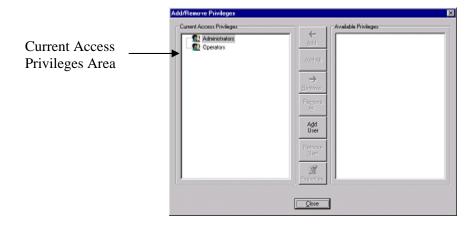
To ensure the integrity and security of the Card Maintenance Utility data, only administrators and operators who have been assigned the appropriate privileges can access the application's functions. The user designation types include:

Administrator - Administrators can log on, and have access to application functions according to the privileges assigned to them. They can also designate users as Operators or Administrators.

Operator - Operators can log on, and have access to only application functions according to the privileges assigned to them.

Add Administrators and Operators (Administrators Only)

To add a user as an administrator or operator, an administrator must be logged onto the application.



➤ Refer students to Administrator's guide – pg. 23-24, sec.3.2. Perform steps 1-9

Remove Administrators and Operators (Administrators Only)

7.1.1.1.1.4

To remove a user as an administrator or operator, an administrator must be logged onto the application.

➤ Refer students to Administrator's Guide – pg. 25, sec. 3.3. Perform steps 1-6.

Change Privilege Expiration Dates (Administrators Only)

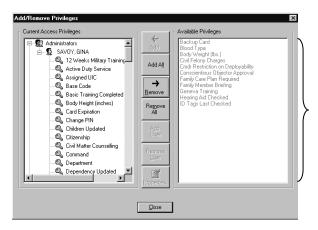
7.1.1.1.1.5

After an Administrator or Operator has been added to the database, their privileges expiration date can be changed at any time. Only an Administrator logged onto the application can perform this function.

➤ Refer students to Administrator's Guide – pg. 26-27, sec. 3.4. Perform steps 1-7.

Add Privileges (Administrators Only)

To add privileges to an administrator or operator, an administrator must be logged onto the application.



Available Privileges Area

➤ Refer students to Administrator's guide – pg. 28-29, sec.3.5. Perform steps 1-7.

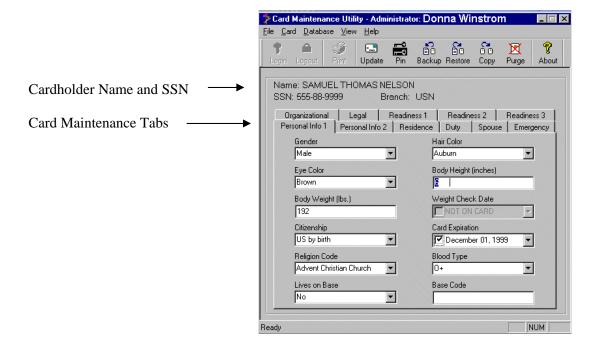
Remove Privileges (Administrators Only)

To remove privileges from an administrator or operator, an administrator must be logged onto the application.

➤ Refer students to Administrator's guide – pg. 30-31, sec.3.6. Perform steps 1-6.

Update Card Information

Once Administrators and Operators have been added to the database and assigned privileges, they can update certain data on a cardholder's smart card. The data fields that can be update is based on the privileges assigned to the operator.



➤ Refer students to Administrator's guide – pg 34-35, sec 4.1. Perform steps 1-8.

Change PIN

Administrators or Operators with the assigned privilege can change a cardholders' PIN.

➤ Refer students to Administrator's guide – pg. 36-37, sec 4.2. Perform steps 1-7.

Unlock PIN

Administrators or Operators with the assigned privilege can unlock a cardholders' PIN. The Unlock feature permits a PIN change on the card without knowing the original PIN. (*This feature is not available for the CAC smart card system.*)

➤ Refer students to Administrator's guide – pg. 38-39, sec.4.3. Perform steps 1-6.

Back Card Information

Administrators or Operators with the assigned privilege can backup information on a cardholder's smart card to the database. If a card is lost or stolen, you can retrieve the file from the database, and write it to a new smart card.

➤ Refer students to Administrator's guide – pg. 40-41, sec.4.4. Perform steps 1-4.

Restore Card Information

Administrators or Operators with the assigned privilege can restore (write) a cardholder's data from the database to a new smart card. Before the information can be moved to a new card, the cardholder's name and SSN must be encoded on the new card.

➤ Refer students to Administrator's guide – pg 42-43, sec. 4.5. Perform steps 1-5.

Copy Card

Administrators or Operators with the assigned privilege can copy a Recruit smart card to a Joint smart card, or copy a Joint smart card to a CAC smart card.

➤ Refer students to Administrator's guide – pg 43-44, sec. 4.6. Perform steps 1-9.

Purge Card

Administrators or Operators with the assigned privilege can remove all the information on a cardholder's smart card except for the cardholder's Name, SSN, Duty Status, Branch of Service, and Rank.

➤ Refer students to Administrator's guide – pg 45-46, sec. 4.7. Perform steps 1-5.

MEC Maintenance

MEC Maintenance provides the ability to Import, Update and Purge. Import allows the user to select a comma-delimited text file containing a list of (SSN, UIC) pairs. The imported values are placed in the MECImport table in the database. Purge allows the user to select a purge date and deletes all elements entered into the MECImport table that occur prior to the purge date. Update allows the user to update the MEC and Assigned UIC information on the card if the user's SSN exists in the MECImport table.

➤ Refer students to Administrator's guide – pg 46-48, sec. 4.8. Perform steps associated to each function.

Database Operations

Card Maintenance Utility has active and archive databases. The active database keeps a record of all operators and administrators and a record of all current cardholder modifications. The application allows you to move older cardholder modification records to the archive database or delete the record from the database. This keeps the application streamlined and performing at optimal levels.

Archive Card Modification Records

Administrators or Operators with the assigned privilege can archive records of card modifications made before a specified date. These records are removed from the active database and moved to the archive database for storage. This helps to keep the active database streamlined.

➤ Refer students to Administrator's guide – pg 50-51, sec. 5.1. Perform steps 1-4.

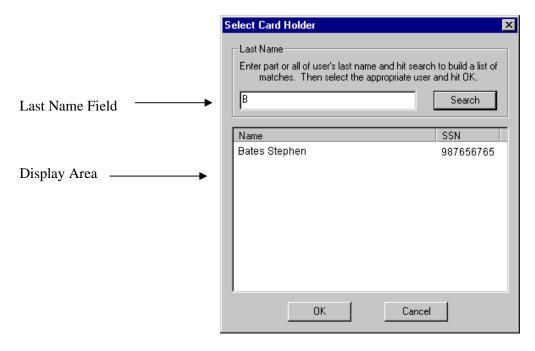
Import Card Modification Records by Person

Administrators and Operators with the assigned privilege can import archived card modification records back to the active database. Importing can be done based on the person's name or by a selected date.

➤ Refer students to Administrator's guide – pg 52, sec. 5.2.1 & pg. 54, sec. 5.2.2.

Delete Card Modification Records

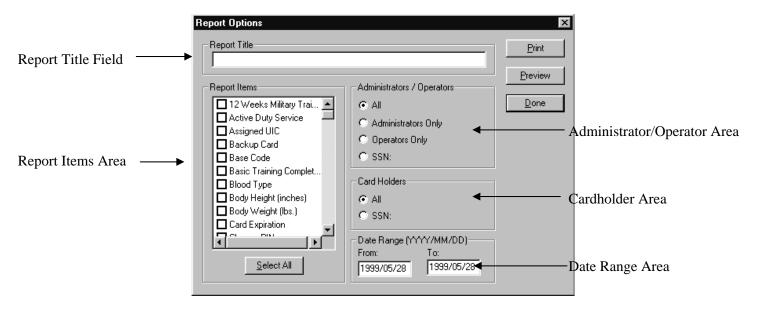
Administrators and Operators with the assigned privilege can you can delete card modification records from the active and archive databases.



➤ Refer students to Administrator's guide – pg 55-56, sec 5.3. Perform steps 1-7.

Reports

Administrators and Operators with the assigned privilege can generate customized administrative reports based on information gathered by the Card Maintenance Utility application. Reports can be customized by selecting different combinations of report options and then viewed or printed.



➤ Refer students to Administrator's guide – pg 58, sec. 6.1 & pg. 65, sec. 6.2.

Note: *Instructor – Sec 6.1 addresses the generation of the report and sec. 6.2 addresses the printing of the report.

Training Evaluation

Our professional staff strives to provide its customer with the highest quality products and the training necessary to use those products. To ensure that this is accomplished in future training sessions, please take a few brief moments to evaluate the training that you received. Please circle your response to each of the following questions.

1.	The training staff provided a clear and concise understanding of what this training was about and what the students were expected to learn.			
	Strongly Agree Agree Somewhat Agree Strongly Disagree	Disagree		
	Comments:			
2.	The training staff was knowledgeable about the subject matter and was able to convey the material to the class in an effective manner.			
	Strongly Agree Agree Somewhat Agree Strongly Disagree	· ·		
	Comments:			
3.	The training environment was suitable for the training conducted, there was adequate equipment to train on, and it functioned properly.			
	Strongly Agree Agree Somewhat Agree Strongly Disagree	Disagree		
	Comments:			
4.	This training will enhance my current job performance or has adequately prepared me to perform a new task for which the training was conducted.			
	Strongly Agree Agree Somewhat Agree Strongly Disagree	Disagree		
	Comments:			
5.	I recommend that others in my position attend this training			

	Strongly Agree Strongly Disa Comments:	C	Disagree
6.	Please state what coryou.	uld have been done during th	nis training to make it more beneficial to
7.	Please tell us what y	ou thought was the most ber	neficial aspect of this training.